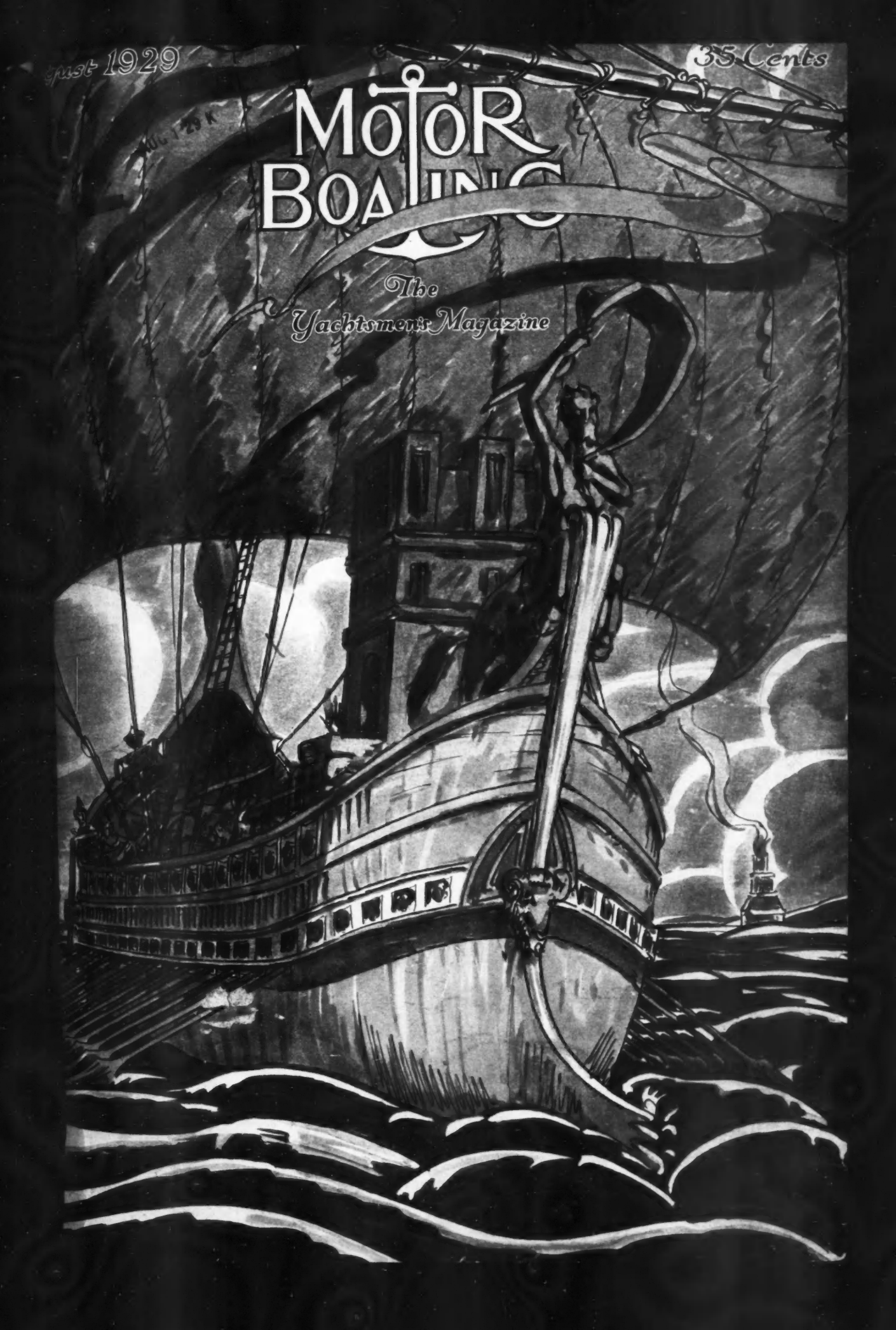
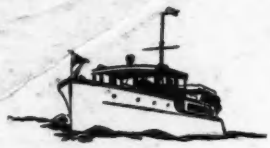

August 1929
35 Cents
MOTOR BOATING
The Yachtsmen's Magazine



Life aboard is life at home

Picnic lunches are delightful.... occasionally.... but good living.... comfortable living.... the kind of living the American yachtsman wants and expects, requires three wholesome hot meals every day.

The galley of the Dawn 45 is a real kitchen with plenty of locker space for food and dishes.... a deck filling ice box that stows 250 lbs.... of course, running water.... and a gas stove with two burners, an oven and a broiler. The hatchway leads to above decks so no one is disturbed while a meal is being prepared.

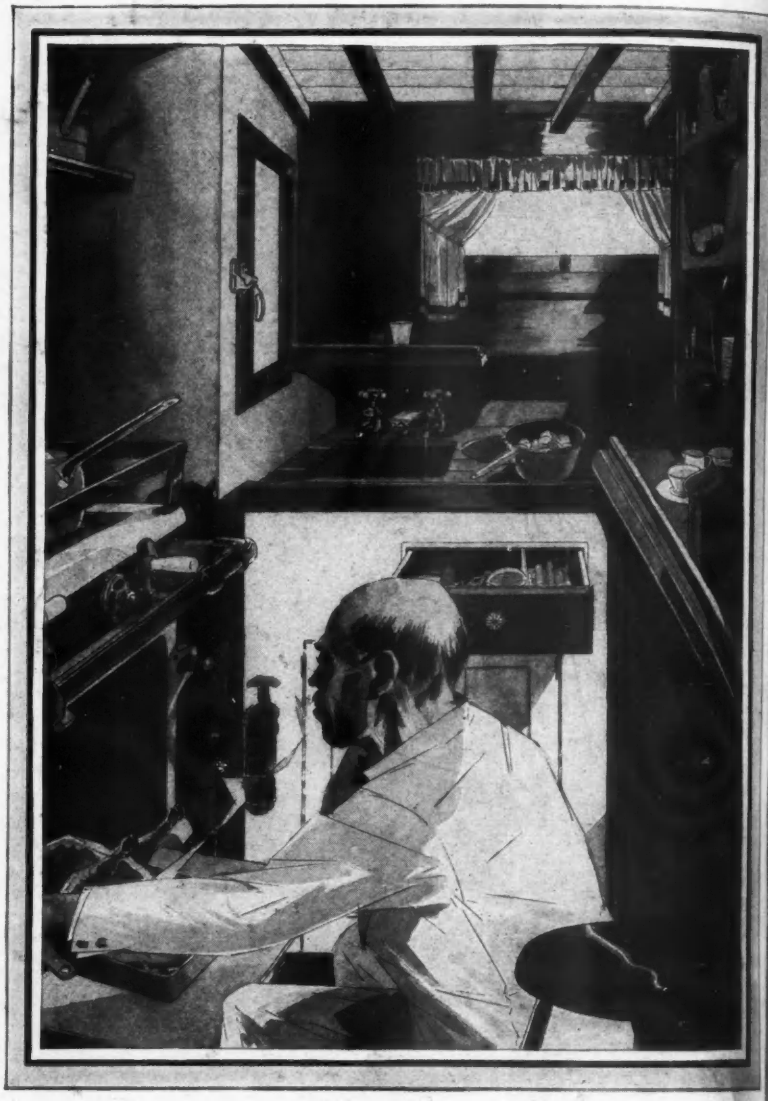
Home comforts due to careful layout and adequate equipment are as characteristic of the Dawn 45 as are fineness of finish and appointments, seaworthiness of hull and abundance of engine power. If you can't come aboard and judge for yourself, let us send you literature.

DAWN BOAT CORPORATION

CLASON POINT, NEW YORK CITY

Westchester 7000 Established 1906

The World's Largest Builders of Standardized 45-Footers



DAWN 45

15,900 *complete*

Afloat at Clason Point
Powered by twin Lathrops

47.288 m.p.h. class D-

Again—Official American Record, Class D, Division II Mile Trials. Made by H. G. Ferguson at Newport Beach, Calif., June 15, 1929, with a SEA-HORSE 32. Fastest time ever made by any outboard motor.

World's Fastest Outboard Motors

40.111 m.p.h. class B-

Again—Official American Record, Class B, Division II Mile Trials. Made by John Adams at Newport Beach, Calif., June 15, 1929, with a SEA-HORSE 16. Fastest time ever made by any B class motor. Not even a C class motor—anytime, anywhere—has gone so fast!

For speed, *plus* dependability, *plus* Underwater Exhaust, *plus* Release Charger starting—get a SEA-HORSE.

The SEA-HORSES

Write for Catalog

JOHNSON MOTOR COMPANY, 3089 Pershing Road

WAUKEGAN, ILLINOIS

In Canada: Canadian Johnson Motor Co., Ltd., Peterborough, Ont.
Distributors for British Columbia: Hoffar's, Ltd., Vancouver, B. C.

Johnson Outboard Motors

WORLD'S LARGEST MANUFACTURER OF OUTBOARD MOTORS

MoToR BoatinG, August, 1929. Volume XLIV, No. 2. Published monthly at 57th Street at Eighth Avenue, New York, U. S. A., by International Magazine Co., Inc. Yearly subscription price: United States, $3.00; Canada, $3.00; Foreign, $4.00. Entered as second-class matter April 15, 1925, at the Post Office at New York, under the act of March 3, 1879. (Printed in U. S. A.)

"I'm too old to use anything but the BEST!"

RACE to victory with EDWARD SMITH Yacht Bottom Green

. . . the ideal bottom finish for racing craft of all types. It dries hard and may be rubbed to a beautiful finish . . . smooth as polished glass. And it will give you the utmost protection from barnacles and fouling possible to get in hard, non-softening hull paint. Follow the example of America's Cup Defenders . . of "Winners" in all classes . . and race to victory with EDWARD SMITH paints and varnishes, the honor-blended marine finishes which have been *manufactured* since 1827. At all good dealers and marine supply houses. Send for descriptive literature and color charts.

E D W A R D

SMITH

& COMPANY

Makers of Marine Paints and Varnishes since 1827

Long Island City

New York

BOTTOM GREEN · DECK BUFF · AQUATITE SPAR · SPAR COATING

There's a Smith Paint and Varnish for every Marine Purpose

Advertising index will be found on 3rd last page

200 miles with Duplex. Bill Frey, winner of the Peoria Marathon

200 Miles without faltering

By winning the gruelling 200 mile race at Peoria on Independence Day, Duplex Marine Engine Oil added new honors to its long list of 1929 victories

FRESH laurels for Duplex OUTBOARD SPECIAL! This time the punishing grind of the 200 mile marathon at Peoria, Illinois, won by Bill Frey and his sturdy Elto. Frey, like all experienced racing pilots, relied upon DUPLEX to furnish lubrication throughout the long, hard run at Peoria. How well DUPLEX served is proved by the fact that Frey's motor was purring as sweetly at the finish as when the starting gun boomed.

Not content with winning top honors in the free-for-all marathon, DUPLEX was also the Class B winner, with J. V. Weaver and his Lockwood engine.

Wherever you find crack racing drivers, there you will find Duplex Marine Engine Oil. For Duplex gives power, reliability, easy starting and cool motors —important factors in racing. The unquestioned choice of all who drive to win, Duplex holds practically every major world's record on the water.

Specified by Chris-Craft, Gar Wood and 29 other builders of fine standardized boats, Duplex occupies a unique place in the marine world. Tip-top performance is yours whenever Duplex is aboard.

ENTERPRISE OIL COMPANY, INC.
Established 1884 **Buffalo, New York**

WHOLESALE DISTRICT DISTRIBUTORS IN

Boston Chicago Cleveland Detroit Houston Miami New Orleans New York Palm Beach
Philadelphia Portland (Ore.) San Francisco Seattle St. Louis Vancouver Wilmington (Calif.)

DEALERS WHEREVER BOATS FLOAT

One Boat that's at Home in Any Port or Anchorage

MONTAUK . . NEWPORT . . NEW YORK . . PALM BEACH . . CHICAGO

DETROIT—boating's smartest rendezvous from coast to coast salute the lithe, trim lines, the jaunty appointments, the gleaming hull contours and buoyant grace of the 39-foot Robinson Seagull. Its distinctiveness, its sweeping beauties become a passport for every owner whose own discrimination guided him in the selection of such a handsome craft. Combining the thrilling speeds of the commuter (30 to 32 miles per hour) with the tangible comforts of a cruiser, the Seagull deftly meets your social and sporting needs afloat. Inquiries are solicited on all three Robinson models.

39-ft. Seagull Sedan Cruiser, Hall-Scott or Sterling Powered—$13,200 to $14,300; 42-ft. Twin Screw Commuter, $22,500; 38-ft. Red Arrow Day Cruiser, Optional Twin Screw Power, $12,800. Represented by A. C. F. Salons, 217 W. 57th St., New York City; 500 East Jefferson Ave., Detroit, and S. Clyde Kyle, Rialto Bldg., San Francisco; Walter Moreton, 1043 Commonwealth Ave., Boston; Kimball Marine Corporation, 29 Wacker Drive, Chicago; R. B. Lechinger, Houston, Texas; Volney Lacy, Rochester, N. Y.

ROBINSON MARINE CONSTRUCTION CO., *Benton Harbor, Michigan*

ROBINSON Seagull

Advertising index will be found on 3rd last page

Silver LEUTZ Ghost

The Finest in Radio
for Residences or Yachts

Leutz Transoceanic "Silver Ghost" Console
Custom Built for
B. J. Howdershell, Los Angeles, California
by

C. R. LEUTZ, Inc.
Altoona, Pa., U. S. A.

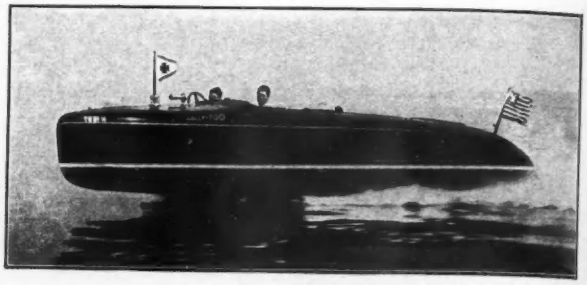
Cables "Experinfo" New York

Sales Offices in New York and Los Angeles

Complete Literature on Request

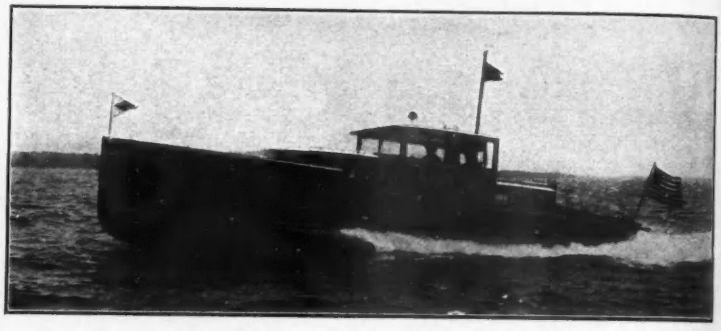
Thoroughbreds

Successful runabouts of highest speed.

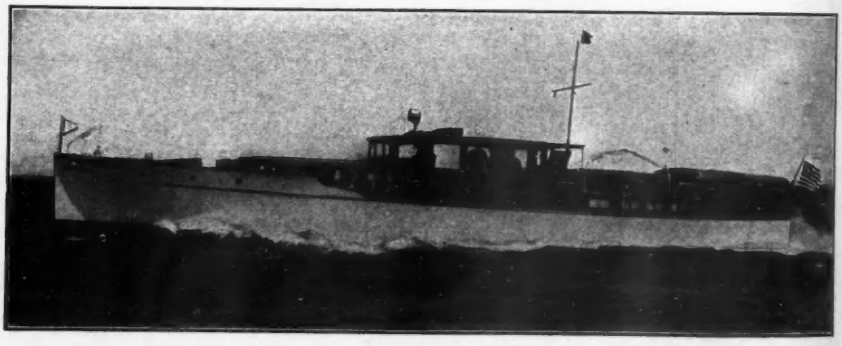


CLEAN cut...vigorous...fleet ...with the beauty of line inherent in a thoroughbred, Luderships stand rigorous inspection from stem to stern.

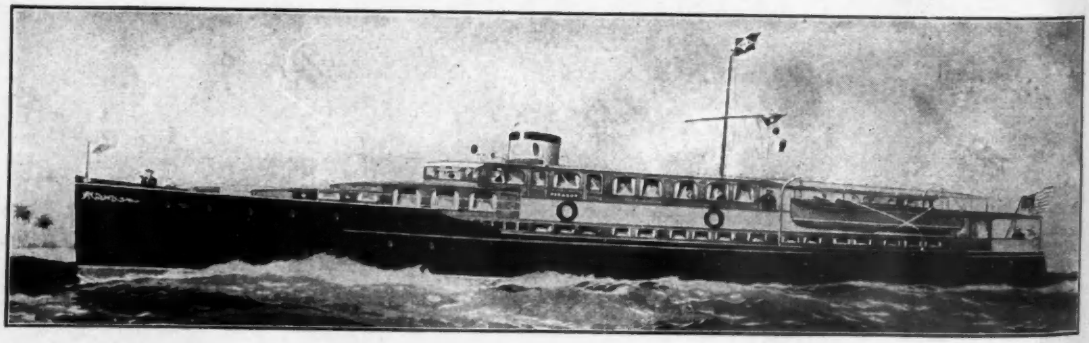
Twenty years of building fine yachts have placed the indelible mark of the master craftsman on every Ludersboat ...perfect in appointment, with a degree of comfort and luxury unknown to the average boat builder.



Deluxe cabin runabout 42' long—the last word in luxury.



72' high speed Commuter that fulfills the exacting requirements of the busy business man.



102' Express Cruiser and Commuter—complete in equipment and appointment for an hour's run or a six months' cruise.

LUDERS MARINE CONSTRUCTION CO.

STAMFORD · · CONN.

Advertising index will be found on 3rd last page

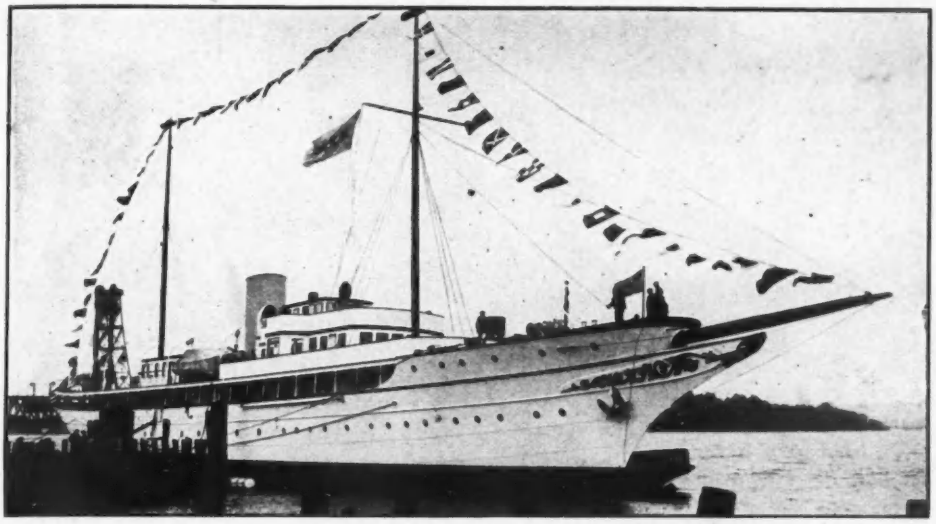
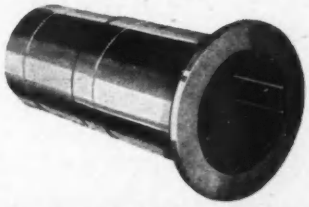


Photo shows the 267 ft. all-steel Diesel yacht, Hi-Es-Maro, designed by Henry J. Gielow, Inc., New York, and built by Bath Iron Works, Bath, Me., for H. E. Manville, Esq., Pleasantville, N.Y. This yacht will shortly make an extended cruise to Norway and Sweden

Gielow chooses Goodrich Cutless Rubber Bearings for the notable new Hi-Es-Maro

To the yachtsman who knows what items of equipment contribute to a boat's reliability and smooth performance, it will be no surprise that the highly important choice of bearings for the Hi-Es-Maro fell to Goodrich Cutless Rubber Bearings.

For everywhere, in constantly increasing numbers, yachtsmen are recognizing the important effect of these amazing rubber bearings on the way their boats perform. They see that Goodrich Cutless Bearings produce a new smoothness of operation, with a greater freedom from annoying vibration, because Goodrich Cutless Bearings, being made of rubber, act as a shock absorber. They see that Goodrich Cutless Bearings eliminate shaft-scoring and bearing wear. Goodrich Cutless Bearings are lubricated entirely by water.



Have Goodrich Cutless Bearings installed the next time you are obliged to have bearings renewed. Goodrich Cutless Bearings outwear all other types of bearings. No change of propeller shaft size is involved. Goodrich Cutless Rubber Bearings effect notable economies in commercial craft installations. Furnished in shaft diameters from ¾ inch to 24 inches.

For your next boat—whether it be a million dollar yacht or small runabout,—be sure to specify Goodrich Cutless Bearings. Most prominent designers and builders now standardize on Goodrich. They are especially recommended when Monel metal shafts are used.

We will gladly send additional information. See the distributor nearest you, or write to The B. F. Goodrich Rubber Co., Est. 1870, Akron, Ohio (In the West, Pacific Goodrich Rubber Co., Los Angeles, Cal.).

DISTRIBUTORS

METROPOLITAN DISTRICT
Topping Bros., 159 Varick St. New York City.

FREEPORT, L. I., N. Y.
The Columbian Bronze Corp.

BOSTON, MASS.
Walter H. Moreton Corp., 1043-45 Commonwealth Ave.

HARRISBURG, TEXAS
Peden Iron & Steel Co.

LOS ANGELES, CALIF.
Pacific Goodrich Rubber Co., 1386 E. 7th St.

SAN PEDRO, CALIF.
Marine Hardware Co. 509 Beacon Street

NEW ORLEANS, LA.
Arthur Duvics Sons, 122 Chartres St.
Alker-Donovan Co., Inc., 435 Camp St.
Stauffer, Eshleman & Co., Ltd.

WASHINGTON, D. C.
R. L. Fryer, Special Rep., The B. F. Goodrich Rubber Co., Cutless Bearing Division, 430 Transportation Bldg.

CHICAGO, ILL.
K. M. Walker & Co., 327 So. La Salle St.

MIAMI, FLA.
Hopkins-Carter Hardware Co. Miami Ave., and S. E. 2nd St.

PHILADELPHIA, PA.
Marine Equipment & Supply Co., 116 Walnut St.

SEATTLE, WASH.
Pacific Goodrich Rubber Co., 115 King St.; Pacific Marine Supply Co., 1223 Western Ave.

SAN FRANCISCO, CALIF.
Pacific Goodrich Rubber Co., 355 Brannan St.
C. V. Lane, Balfour Bldg
Johnson, Joseph & G. M. Josselyn & Co.
56 Sacramento Street

DETROIT, MICH.
H. H. Smith & Co., 334 E. Jefferson Ave.

TAMPA, FLA.
Knight & Wall Co.

BALTIMORE, MD.
The James Walker Co., 123 Light St.

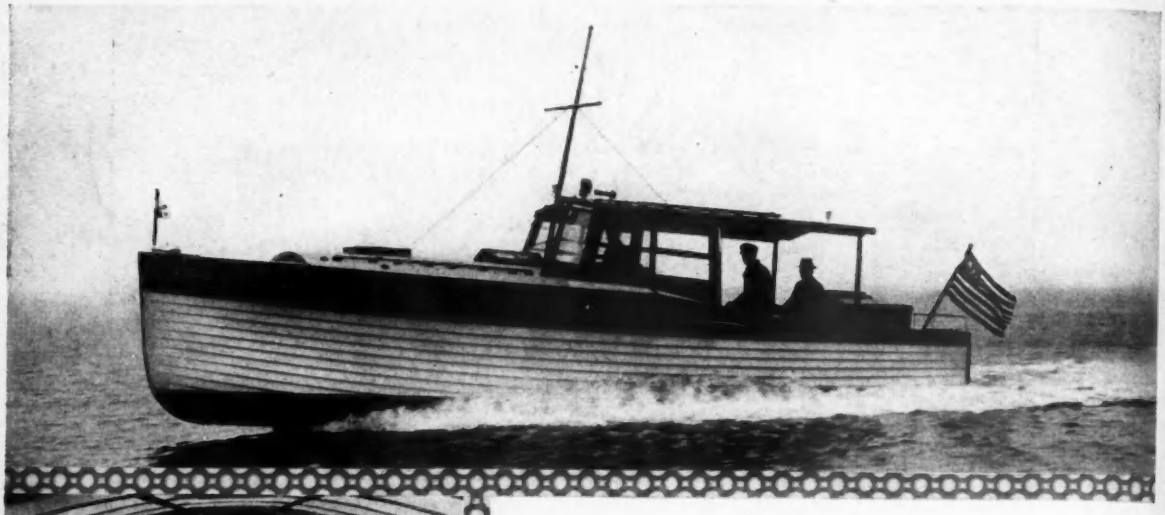
TORONTO, 2, CANADA
John Leckie, Ltd.
77 Wellington St. W.

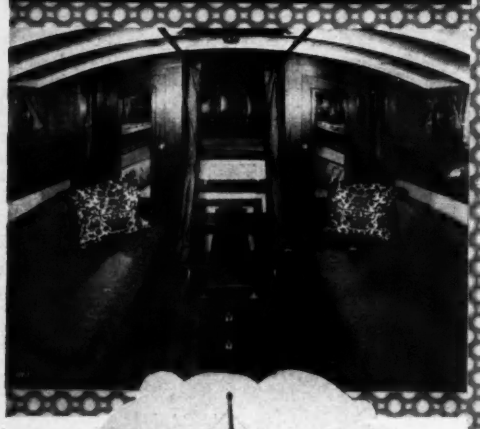
VANCOUVER, B. C.
Fleck Brothers, Ltd., 110 Alexander St.

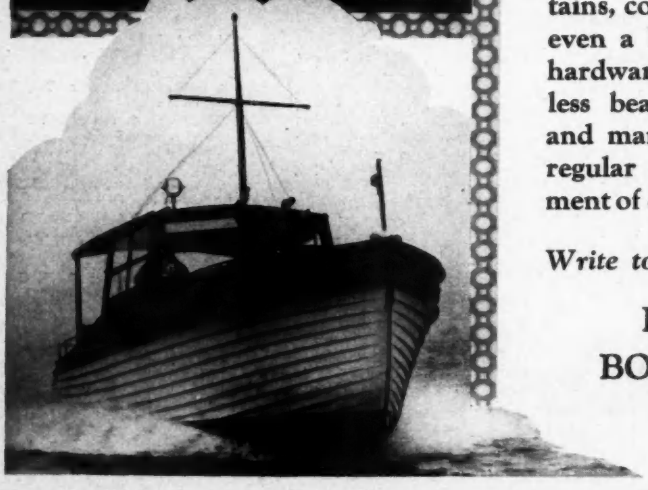
LANCASHIRE, ENGLAND
British Goodrich Rubber Co. Ltd., Leyland.

FRANCE
Societé Française B. F. Goodrich, Colombes (Seine).

Goodrich Cutless Bearings







HUBERT S. JOHNSON
Sea-Skiff
The Better Deep Sea Cruiser

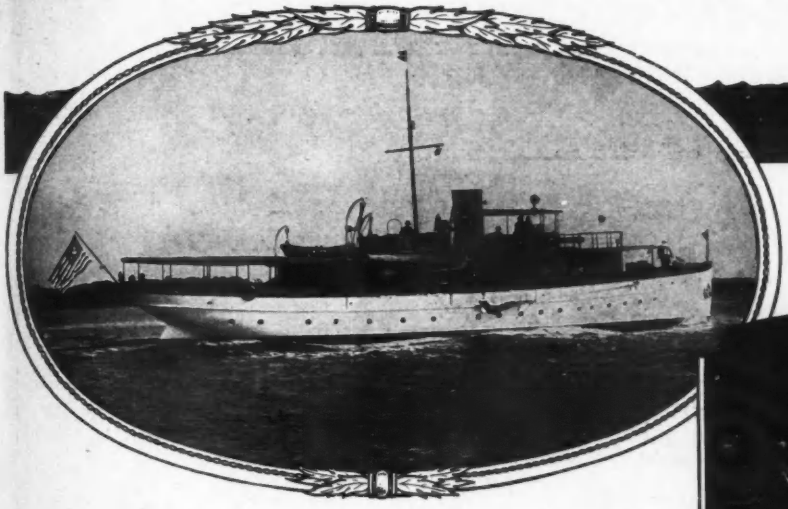
SEAFARING yachtsmen and devotees of deep sea fishing are quick to recognize the superior design, high quality and skilled workmanship of the thirty-six foot Hubert S. Johnson sea skiff cruiser. Its long rakish lines, iron-tough sea skiff construction, two cabins with complete accommodations for six, and a 200 H. P. Sterling motor with a speed of 24 miles per hour provide a combination of desirable features offered by no other boat of equal size.

Hubert S. Johnson sea skiff cruisers are fully furnished with linens, blankets, pullman curtains, cooking utensils, china, silverware and even a high grade radio set. Crodon plated hardware, Monel metal shaft, Goodrich cutless bearings, Lux fire extinguisher system and many other modern improvements are regular equipment. We strongly urge placement of orders now for fall or Florida delivery.

Write today for complete details and price.

HUBERT S. JOHNSON
BOAT & ENGINE WORKS
BAYHEAD, NEW JERSEY

Advertising index will be found on 3rd last page



SARAMAR II
Designed by John H. Wells, Inc. for Mr. Charles T. Fisher—equipped with Tobin Bronze shafting.

JOHN H. WELLS

"Naturally, We Specify

TOBIN BRONZE SHAFTING,"

Says JOHN H. WELLS, *Eminent Yacht Designer*

WHEN a new yacht is designed, the shaft question comes up with the selection of the machinery. Strength and utility with non-corrosive effects are prime considerations.

As designers of many of the finest yachts, JOHN H. WELLS, INC. specify TOBIN BRONZE for many of their express and offshore types of cruisers.

"Although many of our clients care little about price," says Mr. Wells, "we never specify a more costly material than is necessary to fulfill requirements. Long ago we found that TOBIN BRONZE shafting faithfully meets the severe requirements of high tensile strength, resistance to corrosion, uniformity, and durability. So, naturally, we specify TOBIN BRONZE for propeller shafting and other underwater parts. For the vast majority of requirements, we do not find any advantage in the more recent and most costly specialized alloys that come up from time to time."

JOHN H. WELLS, *President,* John H. Wells, Inc.

Thousands of motorboat owners and yachtsmen never think of propeller shafting without thinking of TOBIN BRONZE. So widespread is the acceptance of this metal as the standard of quality that many do not realize that Tobin Bronze is the registered trade-mark of a product made exclusively by The American Brass Company, the largest and most experienced manufacturers of copper, brass and bronze products. Look for the name TOBIN BRONZE rolled in the metal on replacement parts and insist on its use on your new boat.

Trade-Mark "Tobin Bronze" Registered U. S. Pat. Off.

THE AMERICAN BRASS COMPANY

General Offices: Waterbury, Connecticut

ANACONDA SHAFTING

EVERDUR

Reg. U. S. Patent Off.

When lighter weight without sacrifice of strength is essential, we recommend EVERDUR, an Anaconda Alloy of copper, silicon, and manganese. It gives you a shafting with the strength of steel, and maximum resistance to corrosion. Screws, bolts, and other fastenings of EVERDUR are available and are in growing demand by prominent architects, boat builders, and owners.

ANACONDA

Last Four
Gold Cup Winners
Used

TRADE MARK
REG. U. S. PAT. OFF.

WOLF'S HEAD OIL

WOLVERINE · LUBRICANTS · COMPANY · INC.

1924 - 1925
BABY BOOTLEGGER
Owned by Caleb Bragg

1926 - 1927
GREENWICH FOLLY
Owned by George H. Townsend

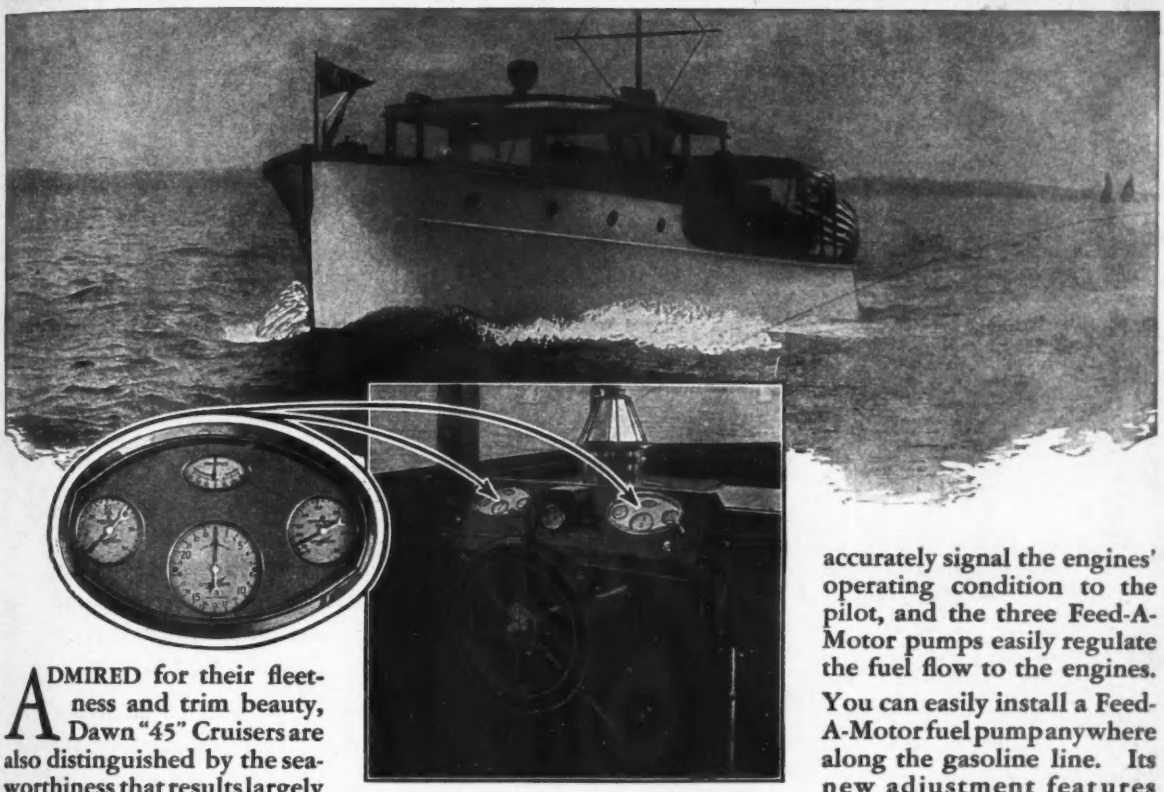
WOLF'S HEAD OIL in your motor means better lubrication, higher efficiency and longer life. A finer lubricant for marine engines is not made. For twenty years this superior motor lubricant has proven that for minimum wear and maximum economy it is unsurpassed. No matter how gruelling the service may be you will find that because of its heat resisting qualities Wolf's Head Oil will retain its viscosity under conditions that would cause cheaper grade oils to burn up. That is why you, too, should use Wolf's Head in your boat and also in your car.

May we send you some interesting literature and also recommend the proper grade of Wolf's Head for your motor? When writing, state make and size of engine.

Dealers Wanted. Send today for proposition.

WOLVERINE LUBRICANTS COMPANY, INC.
51 Madison Ave., New York City

Advertising index will be found on 3rd last page



ADMIRED for their fleetness and trim beauty, Dawn "45" Cruisers are also distinguished by the seaworthiness that results largely from engine reliability. Consolidated precision marine devices help achieve this safe economical engine operation.

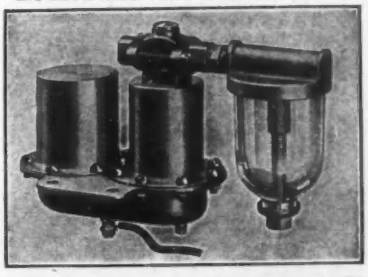
For every Dawn "45" Cruiser is standard equipped with two Consolidated instrument panels, as illustrated, and with three Feed-A-Motor electro-magnetic fuel pumps—one on each motor and one on the reserve water supply tank. The indirectly lighted instruments accurately signal the engines' operating condition to the pilot, and the three Feed-A-Motor pumps easily regulate the fuel flow to the engines.

You can easily install a Feed-A-Motor fuel pump anywhere along the gasoline line. Its new adjustment features assure even greater responsiveness to the engine's fuel needs.

If you want the maximum of boating pleasure from your craft—and every water-lover does—Consolidated precision marine equipment is indispensable.

Single-Unit Feed-A-Motor

Feed-A-Motor is an electrically driven fuel pump. New adjustment features give pump a capacity of 18 to 20 gallons per hour with 3 ft. lift and no discharge pressure. Parts made of brass, bronze, and Monel metal. Also double unit available.



CONSOLIDATED INSTRUMENTS

CONSOLIDATED INSTRUMENT CO. *of* AMERICA, Inc.
305 East 47th Street, New York City

Manufacturing Divisions
Julien P. Friez and Sons, Inc., Baltimore, Md.
Molded Insulation Co., Mt. Vernon, N. Y.
Aircraft Control Corp., Philadelphia, Pa.

DEALERS

The rapid growth during recent months in the demand for Consolidated marine instruments makes it essential that more Consolidated dealers be appointed. Your territory may still be open. For complete details, fill out and return the coupon today.

Consolidated Instrument Co. of America, Inc.
305 East 47th Street, New York City

Gentlemen: Is my territory still open? If so, please give me full details of your dealer proposition.

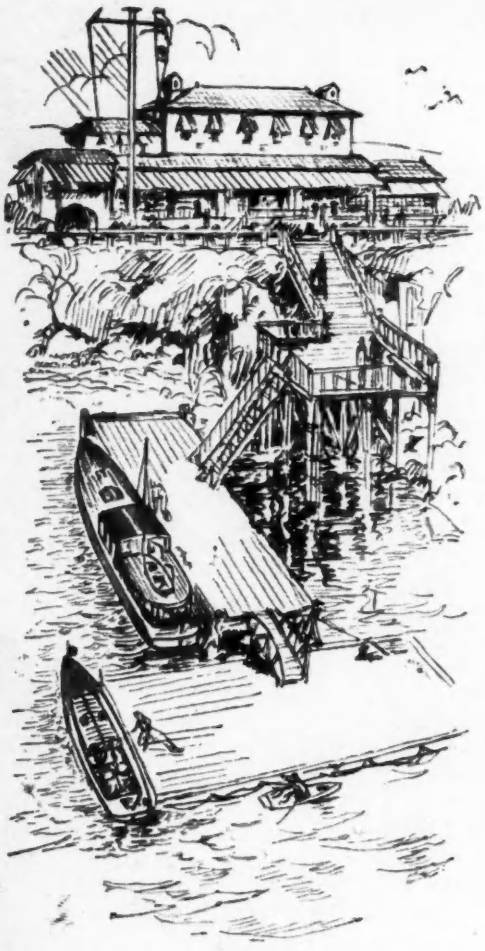
Company_____

Street_____

City_____ State_____

Per Mr._____

Write Today



Swift, Graceful Thoroughbreds of the Waterways

Wherever you sail . . . wherever you drop anchor . . . the grace and beauty of its line and the silent, effortless power of its Speedway engines distinguish your Consolidated yacht as an *aristocrat* among watercraft.

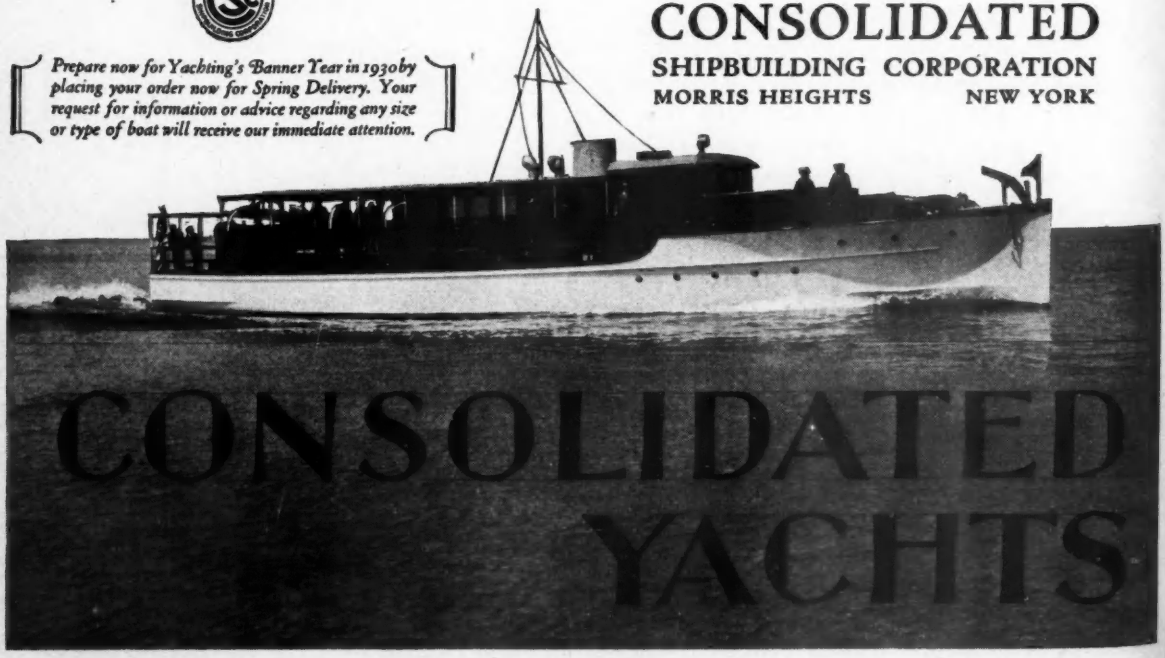
The experience gained over nearly half a century of fine shipbuilding is evident in every Consolidated boat. You see it in the sturdy security of their construction . . . in their seaworthiness . . . in the luxurious comfort of their appointment . . . in the unfailing dependability of their service year after year.

From the dashing little Playboat to the magnificent sea-going Cruiser, Consolidated watercraft possess an individuality that wins enthusiastic admiration. They are unrivalled anywhere —either in appearance or in performance.

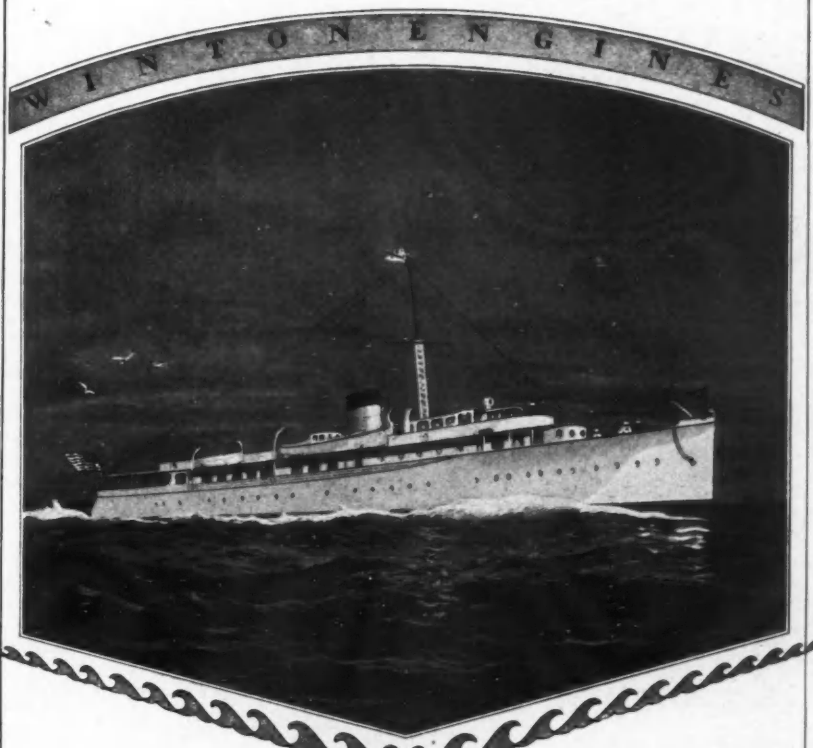
Makers of the famous Speedway Diesel and gasoline engines.

CONSOLIDATED
SHIPBUILDING CORPORATION
MORRIS HEIGHTS NEW YORK

Prepare now for Yachting's Banner Year in 1930 by placing your order now for Spring Delivery. Your request for information or advice regarding any size or type of boat will receive our immediate attention.



Advertising index will be found on 3rd last page



OFF THE "BEATEN PATH"

STRANGE ports—in exotic lands of the East, in the far reaches of the South Pacific, and others just over the horizon—charming playgrounds for the owner of a modern Winton-Diesel yacht. Such a ship, bearing the hallmark of distinctive individuality that only competent designing can impart, represents a new mode of living, encompassing in its superb performance—speed, dependability, luxurious accommodations, and greatly increased cruising radius. You live as at a super-club, with a delightful freedom that opens a new world of enjoyment.

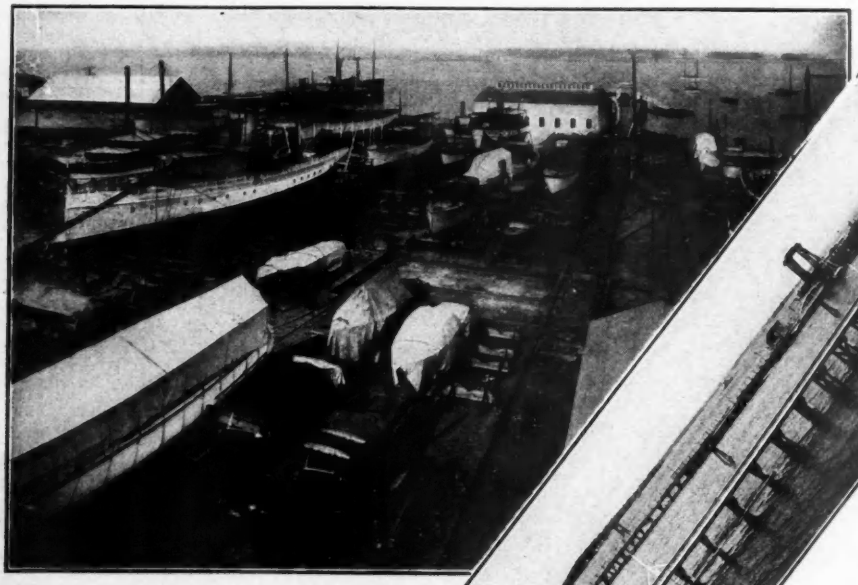
Designed and built especially for the world's finest yachts, Winton-Diesel Marine Engines, with their advanced design and distinctly superior type of service, have established, beyond question, their supremacy in this field.

One of the late Winton-powered ships of distinction is the new *Malaina*, illustrated above. This luxurious yacht was designed by B. T. Dobson, of New Bedford, Mass., and built by the Bath Iron Works, Bath, Me., for Mr. G. M. Moffett, New York City. Powered with two eight-cylinder Winton-Diesels—total 1600 h. p.

THE WINTON ENGINE COMPANY
CLEVELAND, OHIO, U. S. A.

WINTON

A New Interpretation of Yacht Yard Service



Here at your service is a well organized boat yard and plant, ready to undertake and complete with thoroughness and dispatch any job you want done on your boat, from changing wheels or minor repairs to an extensive overhauling, installation or alteration.

Get acquainted with our facilities to serve you in the care, repair and maintenance of your boat.

A large staff of expert yacht craftsmen, organized in specialized crews and departments for each type of work. Unusual equipment of time- and labor-saving machinery and tools. Two marine railways, runabout hoist, boat elevator, rail tractor, machine shop, wood working mill, custom boat department, complete stockroom carrying thousands of items, individual lockers for patrons, etc.

Hauling—Storage—Painting—Fitting Out—
Motor Repairs—Installations

Write today for illustrated folder showing the unusual facilities of this shipyard. Or better still, stop here and inspect the plant the next time you are cruising near City Island.

The Lyon-Tuttle Corporation

King Street, City Island, New York City
Telephones: City Island 1645-1646

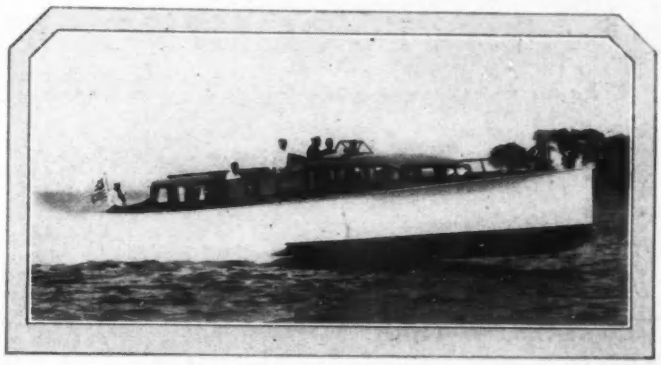
SHOWROOMS

HOWARD W. LYON
INCORPORATED

HOTEL BARCLAY 532 Lexington Ave. (at 49th Street) **NEW YORK**
Telephones Vanderbilt 4445-4446

SEA-LYON RUNABOUTS

Advertising index will be found on 3rd last page



M. Rosenfeld

Caleb Bragg's new hydroplane cruiser Rascal, designed and built for him by the Purdy Boat Works, Port Washington, New York and powered with a pair of Packard marine engines of 550 h.p. each. Rascal has attained a speed of 57 m. p. h. which probably makes her the fastest cruiser afloat

MOTOR BOATING

FIFTY-SEVENTH STREET
AT EIGHTH AVENUE
NEW YORK, N. Y.

AUGUST, 1929

Vol. XLIV, No. 2

Edited by

CHARLES F. CHAPMAN

CONTENTS

Calendar of Coming Events	16
What is An American Outboard Record?	18
American Motor Boat Records	20
Resolute Gets Underway	22
Huck Says They Mutinies at Sea Island	23-25
From the States to Alaska	26-28
Al Loomis' Cutter Hotspur	29
New London Plays Host to Season's Newest Yachts	30-31
Perciana IV—A Modern Diesel Yacht	32
New Cruiser Rule a Success	33
The Work of the Coast Guard	34-35
What the Novice Should Know	36-38
The Conversion of Gwemmy	39-42
America Wins Again	43
Miles of Action	44
Rosie's New Foto	45
Cruising Through the Sea Lyon Boat Shops	46-47
Benbow—A Deep Sea Auxiliary	48
Rampant—A Novel Runabout	49-51
Small Boats, Their Care, Construction and Equipment	52-55
Question 1. Tools Are Needed on Boats	52-53
Question 2. Emergency Repairs to Outboard Planks	54-55
The Choice in Scripps Engines	56
Yard and Shop	58-60

Outboard MoToR BoatinG

Pepping Up the Outboard	165-167
Albany Sets New Records	170-171
Fast Time Around Manhattan Isle	168
Peoria Opens Permanent Water Track	174
Al Buffinton, the Daddy of the Outboards	176
Outboard Notes	178-180

OUR COVER THIS MONTH

by GIRO is a mediaeval Roman warship suggested to the artist by an old print and available data.

As shown by the ram at her bow and the tower from which missiles could be hurled at the enemy, she is a warship and is leaving the ancient harbor to make sure that the course to Egypt is clear, so that the cargo ships that are to follow will not be molested by pirates which apparently were plentiful in the Mediterranean throughout the ages until Decatur helped to make piracy an unprofitable business.

Published monthly by the International Magazine Company Inc., at 57th Street, at Eighth Avenue, New York City.

Ray Long, President — Thomas J. White, Vice-President — Austin W. Clark, Treasurer — Arthur S. Moore, Secretary

Single copies, per issue, thirty-five cents. Yearly subscription in the United States and Canada, $3.00. In foreign countries, $4.00. When you receive notice that your subscription has expired it is best to renew it at once, using the blank enclosed. When changing an address, give the old address as well as the new and allow five weeks for the first copy to reach you.

Copyright, 1929, International Magazine Company, Inc. MoToR BoatinG is fully protected by copyright and nothing that appears in it may be reprinted wholly or in part without permission.

CALENDAR OF COMING EVENTS

August 2—Traverse City, Michigan—I. C. Murray, Grand Traverse Boat Club, Traverse City, Michigan.

August 2, 3—Newport, Rhode Island—Dr. H. P. Beck, Newport, R. I.

August 3—Stone Harbor, N. J.—Martin Fritch, Mays Landing, N. J.

August 3—City of Detroit Carnival—Ivan Kirlin, 1240 Free Press Bldg., Detroit, Michigan.

August 3—Long Lake Boat Club, Long Lake, N. Y.

August 3—Fire Island Yacht Club, Ocean Beach, N. Y.—Great South Bay Yacht Racing Asso.—Comm. A. L. George, 608 Madison Avenue, New York City.

August 3—Dayton, Ohio—Dayton Power Boat Club—C. A. Stifel, Comm., 38 East 5th St., Dayton, Ohio.

August 4—Offut Lake, Washington—B. A. Anderson, Seattle, Wash.

August 4—Milwaukee, Wisconsin—Wisconsin Boating Asso.—H. F. Van Horn, 91 Mason St., Milwaukee, Wisconsin.

August 4—Fox Lake, Ill.

August 5—Tupper Lake Speed Boat Club, New York.

August 5—New Bedford, Mass.—F. Wigglesworth, 20 Brookline Ave., Boston, Mass.

August 7—Cranberry Lake, N. Y.

August 8—N. Y. Y. C. Cruise starts Morris Cove.

August 9, 10—Philadelphia Outboard Regatta—Philadelphia Outboard Regatta Asso., Atlantic Bldg., Phila., Pa.

August 9, 10—Camden, Maine—F. Wigglesworth, 20 Brookline Ave., Boston, Mass.

August 9, 10—Saranac Lake, N. Y.

August 9, 10, 11—Harbor Springs, Michigan—I. C. Murray, Grand Traverse Boat Club, Traverse City, Mich.

August 10—Mt. Clemens Cruise—Richardson Race, Lake St. Clair—Ivan Kirlin, 1240 Free Press Bldg., Detroit, Michigan.

August 10, 11—Bay Head, 151 Championships, Bay Head Y. C., Long Island.

August 10 and 13—Annual Races, Tri-State Yacht Club—E. J. Van Sciver, 17th and Chestnut Sts., Philadelphia, Pa.

August 11—Norristown, Pa.—H. F. Keeler, 637 Haws Ave., Norristown, Pa.

August 11—Oconomowoc Water Carnival—Wisconsin Boating Asso.—H. F. Van Horn, 91 Mason St., Milwaukee, Wisconsin.

August 13—Lake Placid Boat Club, N. Y.

August 14-16—International Races, Royal Antwerp Yacht Club, Belgium.

August 15—Rouses Point Y. C., New York.

August 16—Boothbay Harbor, Maine—S. E. Cliff, Boothbay Harbor Y. C., Boothbay.

August 16, 17—Miles River, Maryland—Miles River Yacht Club.

August 16, 17—Lake Gogebic, Michigan Water Carnival—Frank B. Abelman, Bessemer, Michigan.

August 17—Scripps Trophy Race, Detroit Edison Regatta—Ivan Kirlin 1240 Free Press Bldg., Detroit, Michigan.

August 17—Class Regatta, Farragut, Camden and Forrest Hills, clubs.

August 17—Osterville, Mass.—Frank Wigglesworth, 20 Brookline Ave., Boston, Mass.

August 17—Westport, New York.

August 17—Portland, Me., Regatta and Ocean race for cruisers, 92 miles—P. James, 5 West St., Portland, Me.

August 18—Lake Sammanish, Seattle, Wash.—B. A. Anderson, Seattle, Wash.

August 18—Green Bay, Wisconsin—Green Bay Waters Asso.—P. F. Neverman, Marinette Industrial Board, Marinette, Wisconsin.

August 18—Eagle Lake, Wisconsin—Wisconsin Boating Asso.—H. F. Van Horn, 91 Mason St., Milwaukee, Wisconsin.

August 18—Fox Lake, Illinois.

August 19—Schroon Lake, New York.

August 21—Burlington Yacht Club, Burlington, Vt.

August 23-September 7—Canadian National Exhibition, Toronto, Canada—Outboard Motor Boat Races.

August 23, 24—Iroquois Yacht Club, Lachine, Montreal, Quebec.

August 24—Chathem Ontario Cruise—Ivan Kirlin, 1240 Free Press Bldg., Detroit, Michigan.

August 24—Anniversary water carnival and speed boat regatta, Trenton, N. J.

August 24-25—Niagara Boat Club, Buffalo, New York—Comm. Arthur G. Baitz, 78 Oakwood Pl., Buffalo, N. Y.

August 24, 25—Gold Cup Regatta, Red Bank, N. J.—R. L. Linton, Red Bank, N. J.

August 24-31—Seventh Annual Pacific Coast Championship Yachting Regatta—San Francisco Bay—John W. Hodge, Hunter Dulin Building, 111 Sutter St., San Francisco, California.

August 25—Williams Bay on Lake Geneva—Wisconsin Boating Asso.—H. F. Van Horn, 91 Mason St., Milwaukee, Wisconsin.

August 29—Commodore's Annual Review, Detroit Yacht Club.

August 31-September 2—Cruising Club of America Labor Day Week-end at Lloyds Harbor, Long Island—E. H. Tucker, Sec'y, 81 Fulton Street, N. Y. C.

August 31—Keystone Yacht Club, Tacony, Pa.—F. Von Nieda, 3309 River Ave., Camden, N. J.

August 31—Ocean City, New Jersey.

August 31-Sept. 2—Detroit, Mich., British International Trophy Races—W. D. Edenburn, 5-218 General Motors Bldg., Detroit, Mich.

September 1, 2—Kansas City—St. Louis Marathon—Kansas City Outboard Motor Boat Club.

September 2—Fall Regatta, Larchmont Y. C., N. Y.

September 2—Rutherford Yacht Club - Outboard races.

September 2—Barnegat Bay, Sailing races of Barnegat Bay Yacht Racing Asso. for Thacher, Stanger and Middleton cups.

September 2—Third Annual Labor Day Regatta, Lake Elsinore, California—D. Mackay, Lake Elsinore, Cal.

September 2—American Lake, near Tacoma, Wash.—B. A. Anderson, Seattle, Wash.

September 2—Mullica, New Jersey.

September 2—Fox Lake, Illinois.

September 2—Traverse City, Michigan—I. C. Murray, Grand Traverse Boat Club, Traverse City, Michigan.

September 2—International Championship, Lake Minnetonka, Spring Park, Minn.—S. Miller, Northern Research Industries, Minneapolis, Minn.

September 6, 7—Barnegat Bay Y. R. A. cruise to Little Egg Harbor Yacht Club at Beach Haven and regatta there.

September 7—Detroit Y. C. Sweepstakes—Ivan Kirlin, 1240 Free Press Bldg., Detroit. Michigan.

September 7—Margate, Longport, N. J—O. H. Adams, Longport, N. J.

September 7, 8—Cruising Club of America—Jeffrey Lodge Auxiliary Race, Boston Chapter.

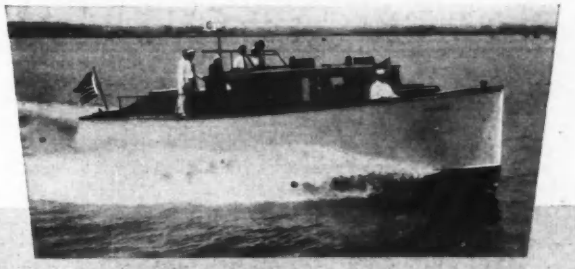
September 7-15—Venice, Italy, International Motor Boat Regatta.

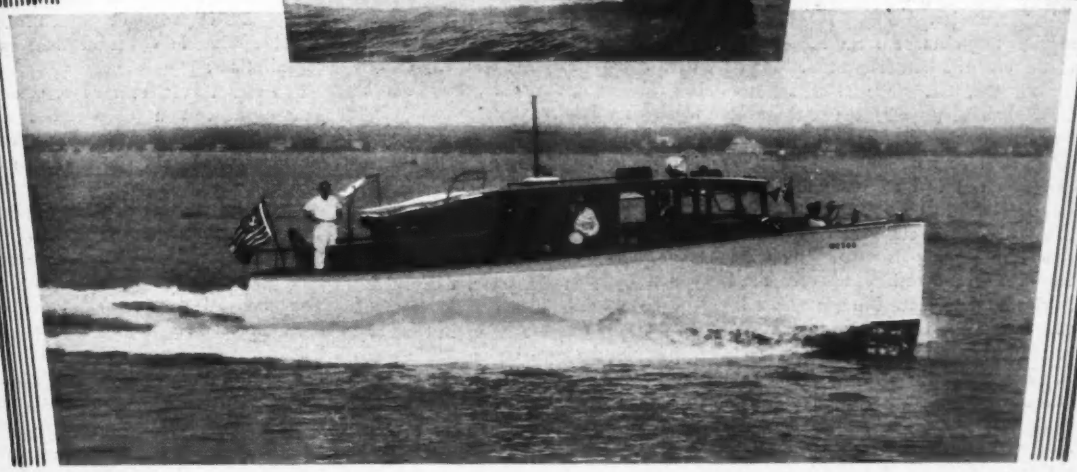
September 8—Passaic River Yacht Club, Hackensack River Station—Outboard Regatta.

September 8—New England Championships, Wollaston, Mass.—F. Wigglesworth, 20 Brookline Ave., Boston, Mass.

September 8—Cruiser Championships, Anchor Yacht Club, Bristol, Pa.—F.

(*Continued on page* 144)





6 Months TO BUILD ONE and A LIFETIME TO ENJOY IT

Entirely revolutionizing all previous ideas of speed, comfort and performance the Fairform Flyer Cruiser and commuter models now provide an irresistible appeal for those yachtsmen who seek a boat of outstanding originality of design and flawless workmanship. Each Fairform Flyer requires six months to complete. Each boat when it is launched reflects in its exterior and interior finish and appointments—in its perfected riding grace and sturdiness a rare degree of custom-built completeness. Inquiries should be inaugurated now for Fall and Winter deliveries. Complete details will be supplied all interested parties.

HUCKINS YACHT CORPORATION

JACKSONVILLE **FLORIDA**

The Twin Screw Fairform 45 Flyer

$17,500

WHAT IS AN AMERICAN OUTBOARD RECORD?

WHEN you play baseball you play it on a diamond of standard size. The baseball rules specify the distance from home plate to the pitcher's box, from first base to second, etc., etc. The rules say the game shall be played between teams of nine men each, that the length of the game shall be nine innings (except in case of a tie) that the batter is out on three strikes, that he takes his base on four balls, etc., etc. No one would think of playing baseball otherwise. No one ever questions whether these rules are fair or not. No one even asks who makes the baseball rules and few people know. In even the poorest bush-league games they play with a standard ball of specified size and weight. They don't play with ten men or require four men to be out before the side retires.

In tennis you play on a standard size court with a net of a certain height and with a specified system of scoring. In football, the rules are standardized and the same playing rules followed throughout the entire country. In bridge, chess, checkers and what not, the rules are known and followed without any argument as to whether they are good or bad. The same is true in golf or any other sport which might be mentioned. In automobile racing, the only size motor used for the past several years has been one of 91½ cubic inches. The drivers don't get together before each motor car race and decide what size motors they will race. They follow the rules. And if they fail to observe any rule of racing the consequences are serious. The Contest Board of the American Automobile Association deals with them as provided in the rules.

In the World's Series the Toledo or Kalamazoo teams do not get a chance to play the New York Yankees for the World's Baseball Championship even though they may have beaten the Yankees in exhibition games.

Thus, in a similar way, rules have been provided for the establishment of American Outboard Records. The rules were formulated by the National Outboard Racing Commission. This is a body of five men, two of whom have been appointed by the American Power Boat Association, two by the Mississippi Valley Power Boat Association and the fifth by the National Outboard Association. The rules which this Commission have formulated for Outboard Racing and to be followed for American Outboard Records have been approved by the two major motor boat associations just as the baseball rules were approved by the two major baseball leagues. Therefore, they can be taken as official.

The Outboard Racing Rules attempt to specify the most important features of outboard racing, as is well known. They specify the piston displacements of the various classes A, B, C, D, etc., they define an outboard motor and a stock motor, they specify which way the turns shall be made, give starting and scoring instructions, rules for timing, entries, disqualifications, etc., etc.

Among other things, the Outboard Racing Rules specify the conditions under which an American Outboard Record can be established, just as rules for Championships in other sports are clearly set forth.

On the track we have the 100 yard, 220 yard, ½-mile, 1-mile, etc. etc., champion. No one ever thinks it strange that he does not hear of the 115-yard champion or the championship foot ball team that has beaten all competitors on a 65-yard gridiron. So it is in outboard racing, certain distances are specified for the outboard championships and no other distances are recognized.

The distances which are recognized are the 5-mile, 6-mile, 10-mile and 15-mile records and none others. Such records are allowed in each of the classes A, B, C, D and E and in Division I and Division II. Mile trial records on a 1 statute and 1 nautical mile straightaway are also provided for. All records, except the 1-mile straightway, must be made on a 2½-mile or 3-mile course. The particular shape of the course is not specified.

As water conditions differ on different days and at various localities, the speeds made under these varying conditions will not be strictly comparable. However, it is the aim of the rules to make conditions as nearly alike as it is physically possible and thus give all localities a chance to establish records provided, of course, that those persons in charge of the events are capable and careful in the execution of the specific provisions in the rules which refer to records.

An American Outboard Record to be allowed must be made at an event sanctioned by the American Power Boat Association or Mississippi Valley Power Boat Association. The person making the record must be a member of some Club in either of these two organizations.

In order that a race or regatta be sanctioned, certain requirements are necessary. The course must be an official one, surveyed by a certified surveyor, appointed by the American Power Boat Association or Mississippi Valley Power Boat Association and a chart of same filed with the Association granting the sanction. This surveyor must also certify that the course is of the correct length, and that all buoys are in their correct position during the races. The events must be timed by at least three competent timers appointed for the particular race by the Association granting the sanction.

American Outboard Records are allowed only in "Stock" motor classes. The determination as to whether a motor is stock or non-stock is most important. This is done by a thorough inspection by an Inspection Committee appointed by the Outboard Motor Manufacturers Trade Association. If no such Inspection Committee is present at the race, the motor must be sealed immediately after the race and forwarded to the manufacturers committee. If no such inspection is made the Record is automatically null and void. (Application for an Inspection Committee to be present should be made to P. A. Tanner, care Outboard Motors Corporation, Milwaukee, Wisconsin.)

At a race where a record is to be attempted a representative of the National Outboard Racing Commission must be present to report to the Racing Commission whether all requirements of the rules have been complied with. This person is known as an Outboard Referee. The Racing Commission has named a number of persons whom they believe capable of performing such a duty and their names are printed in the Rule Book. However, the particular Referee to serve at a particular race must be designated by the proper person in the American Power Boat Association or Mississippi Valley Power Boat Association at the time sanction is granted.

It is the Referee's duty to see that all provisions of the racing rules are complied with by the contestants and officials and the Referee must report same to the National Outboard Racing

(*Continued on page* 112)

A *New* Gasoline from CALIFORNIA *that is taking the east by storm*

RICHFIELD'S outstanding quality, evidenced by its tremendous popularity wherever it is sold, is due to its natural advantage over other motor fuels. It is made entirely from California napthenic base crude oils, which have a higher percentage of natural anti-knock compounds than crudes from any other section of the country. Add to this, Richfield's exclusive process of refining and its high standards of manufacture and you have the reason why it is today the choice of the world's leading pilots and motor designers, and for the past ten years has won more championships and world's records than all other gasolines combined.

Richfield Ethyl is Ethyl at its best. It is recommended for extremely high compression motors, assuring peak power at all speeds with easy starting and greater power under the severe conditions encountered wherever speed boats gather.

Richlube motor oil is premium Pennsylvania crude refined by a special process that produces the highest possible lubricating qualities—which enable it to withstand the most intense heat in the motor without breaking down.

Richfield products will be used by Gold Cup entrants at Red Bank, N. J., on August 24 and 25. Our Engineering Department is in a position to assist you in the selection of the proper fuel requirements for your power plant.

RICHFIELD OIL CORPORATION OF NEW YORK
CHANIN BLDG., 42nd STREET and LEXINGTON AVENUE
NEW YORK

RICHFIELD

CALIFORNIA'S FAMOUS RACING GASOLINE

AMERICAN MOTOR BOAT RECORDS

Mile Trials
(Average of 6 One Mile Runs)

Miss America VII, owned by Gar Wood, at Miami Beach, Florida, March 23, 1929. Built by Gar Wood, Packard motors. Speed 93.123 m.p.h.

Gold Cup Class

625 cubic inch displacement boats

Fastest heat (3 miles) Hotsy Totsy, owned by Caleb Bragg, Greenwich, Conn., 1927. Time, 35:06:83; speed, 51.261.

Fastest lap (3 miles), Imp, owned by Richard F. Hoyt, Manhasset Bay, 1926. Time, 3:22; speed, 53.58.

Total race (90 miles), Greenwich Folly, owned by George H. Townsend, Greenwich, Conn, 1927. Time 1:51:34.21; speed, 48.39.

(Unlimited Hydroplane)

Fastest heat (30 miles), Miss America, owned by Gar Wood, Detroit, 1920. Time, 25:44; speed, 70.0.

Fastest lap (5 miles), Miss America, owned by Gar Wood, Detroit, 1920. Speed, 71.4.

Total race (90 miles), Miss America. owned by Gar Wood, Detroit, 1920. Time, 1:28:07; speed, 62.0.

Detroit Sweepstakes

Fastest lap (3 miles), Packard Chris Craft 11, owned by Colonel J. G. Vincent, Detroit 1925. Speed, 58.95.

Total race (150 miles), Packard Chris Craft II, owned by Colonel J. G. Vincent, Detroit, 1925. Time, 2:41:47.10; speed, 55.65.

British International Trophy
Unlimited Hydroplanes

Fastest heat (38.1 miles), Miss America I, owned by Gar Wood, England, 1920. Speed, 61.5.

Fastest lap (5.75 miles), Miss America V, owned by Gar Wood, Detroit, 1926. Speed, 72.70.

24 Hours

Rainbow IV, owned by Harry G. Greening, Lake Rosseau, Canada, October 2-3, 1925. Total miles, 1218.88. Speed, 50.78.

1½ Liter Class (Trial Runs)

Newg, owned by Miss M. B. Carstairs, England, March 12, 1927. Speed, 39.45.

In Competition, Little Spitfire, owned by J. H. Rand, Jr., Detroit, September 3, 1927. Speed, 42.17.

151 Class—Unlimited

1-mile straightaway, Spitfire V, owned by J. H. Rand, Jr., Albany, N. Y. July 5, 1927. Speed, 62.82.

In competition, Spitfire V, owned by J. H. Rand, Jr., San Diego, Calif., December 12, 1927. Speed, 55.42.

One lap in competition, Miss California, owned by Loynes-Harris, San Diego, Calif., December 12, 1927. Speed, 59.68.

151 Class Limited

In competition, Miss California, owned by Dick Loynes, at Sarasota, Florida, March 8, 1929. Speed, 49.20 m.p.m.

Mile trials, Miss Rioco, owned by J. A. Talbot, Miami Beach, Florida. March 19, 1928. Speed, 50.60.

340 Class

Miss California, owned by Loynes-Harris, Houston, Texas, July 2, 1927. Speed, 50.99.

510 Class

Miss Houston IV, owned by Frank H. Robertson, Louisville, Ky., July 5, 1926. 10 miles—in competition. Speed, 51.28.

7⅛ miles, Miss Kemah, owned by Henry Falk, Houston, Texas, July 4, 1927. Speed, 53.41.

One Mile Trials—Miss Houston IV, owned by Frank H. Robertson, Louisville, Ky., July 5, 1926. Speed, 53.43.

725 Class

5 miles—Helen, owned by M. J. A. Mitchell, Louisville, Ky., July 5, 1926. Speed, 61.22.

Mile straightaway, Doc's II, owned by I. R. Van Sant, Peoria, Illinois, October 11, 1925, winning King of Belgians' Trophy. Speed, 61.77.

Single Engine Hydroplanes

1 mile, Miss Chicago, owned by Sheldon Clark, Detroit, Sept. 3, 1921. Speed, 72.86.

15 miles in competition, Fore, owned by W. D. Foreman, Cincinnati, Ohio, September 29, 1923. Speed, 64.75.

The official Outboard Racing Rules adopted by all Associations for 1929 recognize American records made only over distances of five, six, ten and fifteen miles and mile trials made over statute and nautical miles in each of the several classifications of engines, by drivers of Divisions I and II.

Division I drivers are defined as those who have competed and finished in less than 15 complete races in a given class.

Division II drivers are defined as those who have competed and finished in 15 or more races in a given class.

It must be emphasized that records under these rules are AMERICAN records and NOT Worlds records.

Mile Trials, Statute Miles

Class A, Division II

B-2, driven by A. Sutherland at Worcester, Mass. May 29, 1929. Built by Herbst, Lockwood engine. Speed 26.31 m. p. h. (9)

Class B, Division I

Miss Hupmobile, owned by T. H. Tupman, driven by John Beneloski, at Balboa, California, June 15, 1929. Built by F. J. Pierce, powered with a Johnson motor. Speed 39.24 m. p. h. (14)

Class B, Division II

Crandall Comet, owned by Crandall Boat Co., driven by John Adams, at Balboa, California, June 15, 1929. Built by Crandall Boat Co., powered with Johnson motor. Speed 40.12 m.p.h. (15)

Class C, Division I

Blue Streak IV, owned by Leo M. Baughman, driven by Chuck Hall, at Balboa, California, June 15, 1929. Built by Lake Elsinore Boat Works, powered with Evinrude motor. Speed 39.56 m. p. h. (16)

Class C, Division II

Blue Streak IV, owned by Leo M. Baughman, driven by H. G. Ferguson at Balboa, California, June 15, 1929. Built by Lake Elsinore Boat Works, powered with Evinrude motor. Speed 39.21 m. p. h. (17)

Class D, Division I

Hard Luck, owned by Frank S. Royer, at Peoria, Illinois, July 5, 1929. Built by Royer, Johnson engine. Speed 41.76 m. p. h.

Class D, Division II

Blue Streak, owned by Leo M. Baughman, driven by H. G. Ferguson at Balboa, California, June 15, 1929. Built by Lake Elsinore Boat Works, powered with Johnson motor. Speed 47.29 m. p. h.

Class E, Division II

Baby Whale XIII, driven by H. R. Maddocks at Worcester, Mass., May 29, 1928. Built by D. N. Kelly & Son, Johnson engine. Speed 35.02 m. p. h. (D)

Mile Trials, Nautical Miles

Class C, Division I

Bossert Pirate, owned by Walter Peterssen, at Albany, N. Y., July 5, 1929. Built by Bossert, Evinrude engine. Speed 34.05 nautical m. p. h.; 39.15 statute m. p. h.

Class D, Division I

Big Ben, owned by Harold Chapman, at Albany, New York, July 5, 1929. Built by Hallock, Johnson engine. Speed 38.09 nautical m. p. h.; 43.80 statute m. p. h.

Class C, Division II

Thisbe, owned by Helen Hentschel, at Albany, New York, July 6, 1929. Built by Hodgson, Evinrude engine. Speed 34.82 nautical m. p. h.; 40.04 statute m. p. h.

Class D, Division II

Uniplex, owned by W. B. Schulte and W. M. Fry at Detroit, Michigan, September 4, 1928. Built by Century, Elto Quad engine. Speed 32.70 nautical, 37.60 statute. (F)

Five Miles

Class B, Division I

BIII, driven by Mrs. B. Wallace at Worcester, Mass., May 30, 1929. Built by Ludington Aircraft, Johnson engine. Speed 33.41 m. p h. (3)

Class C, Division I

B-50, driven by N. F. McKinzie at Worcester, Mass., May 30, 1929. Built by N. F. McKinzie, Evinrude engine. Speed 35.27 m. p. h. (11)

Class A, Division II

B2, driven by A. E. Sutherland at Worcester, Mass., May 30, 1929. Built by Herbst, Lockwood engine. Speed 25.50 m. p. h. (4)

Class B, Division II

Shamrock, C-23, driven by John Graham. At Salton Sea, Coachella Valley, California, May 19, 1929. Built by Lake Elsinore Boat Co., Johnson motor. Speed 36.29 m. p. h. (1)

Class C, Division II

Bonnie Lass, owned by J. Bigson, driven by F. Pierce at San Diego, California, December 16, 1928. Built by J. F. Graham, Evinrude engine. Speed 38.58 m. p. h. (G)

Class D, Division I

Big Ben, owned by Harold Chapman, at Albany, New York, July 4, 1929, Built by Hallock, Johnson engine. Speed 39.57 m. p. h.

Class D, Division II

Baby Whale, driven by R. Stearns at Worcester, Mass., May 30, 1929. Built by D. N. Kelley & Son, Johnson engine. Speed 40.27 m. p. h. (6)

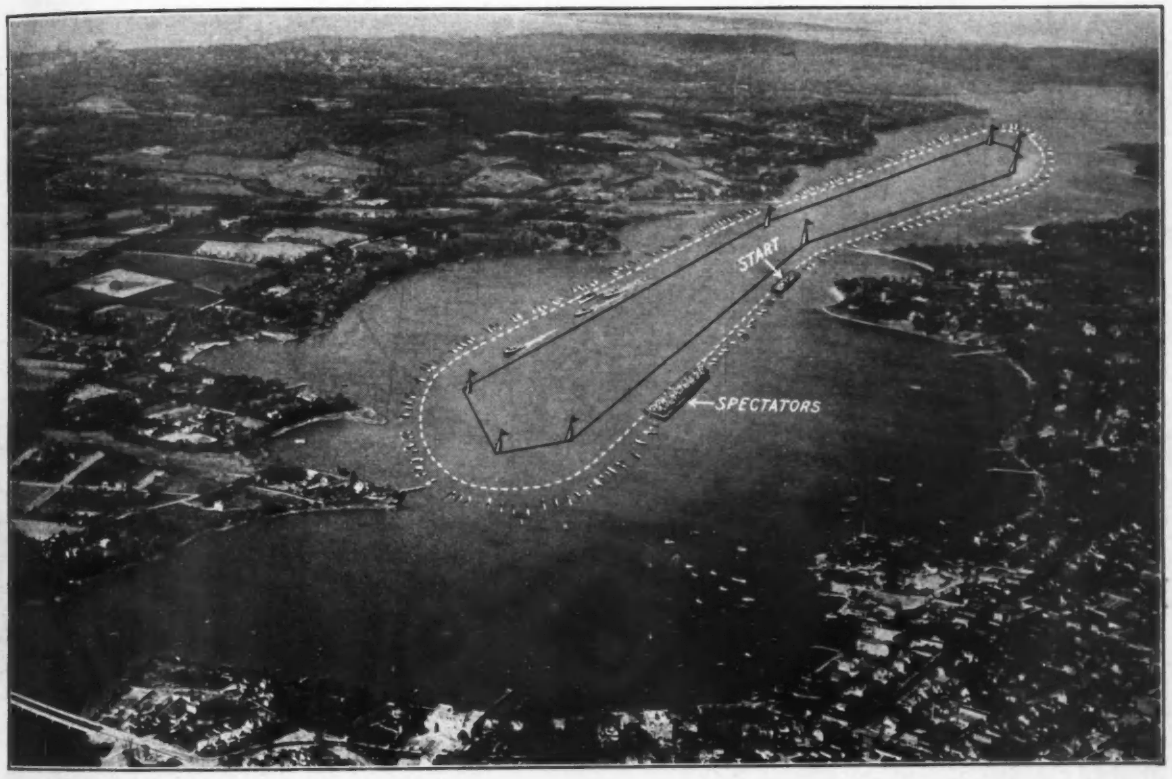
Class E, Division II

Ludington, driven by J. Dunnell, at Worcester, Mass., May 30, 1929. Ludington boat, Johnson engine. Speed 40.36 m. p. h. (5)

(Continued on page 146)

Come to the
GOLD CUP RACES
August 24-25th

On the Shrewsbury RED BANK, NEW JERSEY



Twenty-Two Feature Events

GOLD CUP HYDROPLANES

STOCK RUNABOUTS 151" HYDROPLANES

OUTBOARD RACES* GRAND FREE-FOR-ALL

Spectator Stands at Vantage Points

Venetian Night and Marine Parade, August 23rd

Contestants' Applications and List of Events sent upon request. Address:

Comm. C. F. CHAPMAN
Sec. Racing Commission A. P. B. A.
959 Eighth Ave.
New York City, N. Y.

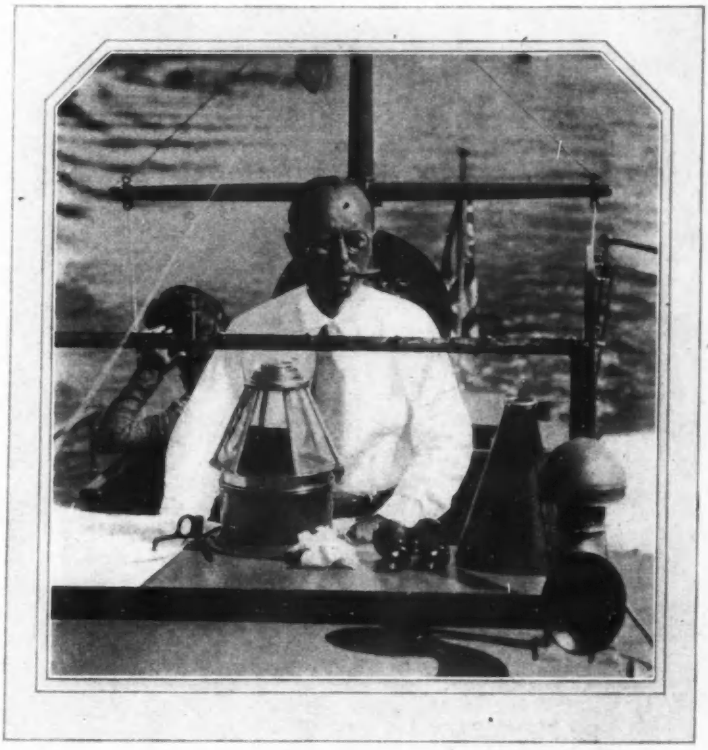
Comm. GERALD C. HOLBROOK
N. J. Gold Cup Association
Molly Pitcher Hotel
Red Bank, New Jersey

***Winners of first, second and third places will be eligible to compete in the Eastern Division National Outboard Championship Races, Boston, Mass., Oct. 4th and 5th.**

M. Rosenfe'd

RESOLUTE GETS UNDERWAY

The challenge of Sir Thomas Lipton for a new trial for the famous America's Cup revives interest in a defender in the last contest. Resolute converted to a schooner yacht has been fighting it out with her rival Vanitie with the honors about equally divided



Huck on the bridge of the flagship, Pilgrim

HUCK SAYS

THEY MUTINIES AT SEA ISLAND

Gruesome Story of the Longest Squadron Cruise on Record

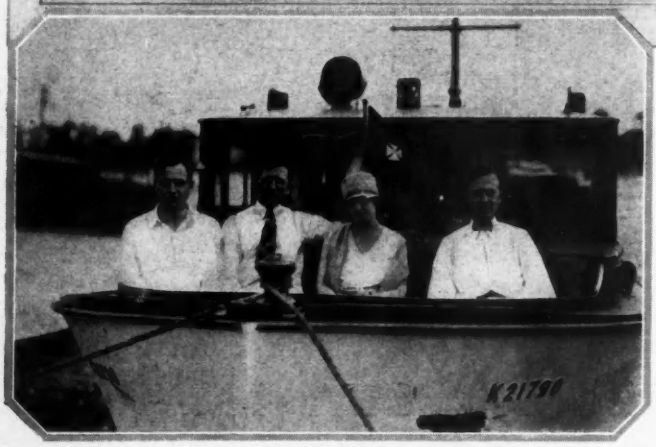
WELL, Chap, if you has ever been a cat and had a litter of kittens, you knows exactly how I feels piloting a fleet of Fairform Flyers eleven hundred miles. If they was ever thirty more irresponsible yachtsmen gathered on six boats, I hopes never to meet them. Why Chap, I starts out to make a serious, dignified cruise with these fellers and all they thinks about, it is whoopee.

You see it starts this way, Chap: Several fellers, they decides to cruise from Jacksonville on their own hook in their new boats. Now I knows full well that if they goes unchaperoned, that they probably gets lost on some Georgia mud bank all summer. So in a moment of abberration, I says to them, says I, "How about making a squadron cruise of it?" and they shouts yes. As they was two owners what couldn't get away to make the trip, but wanted their boats to come by water, I makes the further mistake of asking a couple of my friends to pilot them. These was Henry S. Baldwin of Brookline, next to the last of the Mohicans, and Don Fattarze Barnett, Argentine Cotillion leader and banker, of Jacksonville, a endless source of trouble.

In order that everything runs perfect, I works up a nice schedule, has it printed, sends three hundred copies to the Coast Guard so they knows just where we is every minute and doesn't mistake us for rum-runners. I gets out written instructions to all the captains, which they never reads. I prepares a code and signals, telling them what to do next. When I flies the signals, they thinks I is dressing ship. It was Hell, Chap. Two nights before we leaves, they votes unanimous to put me in supreme command of the fleet. After that nobody pays a bit of attention to anything I says.

The night before we leaves, June 14 to be exact,

The fleet before the start at Jacksonville



Starjak—Left to right, W. H. Stark, Dr. Zurbrigg, Mrs. Earl M. Wilson and Earl M. Wilson, owner

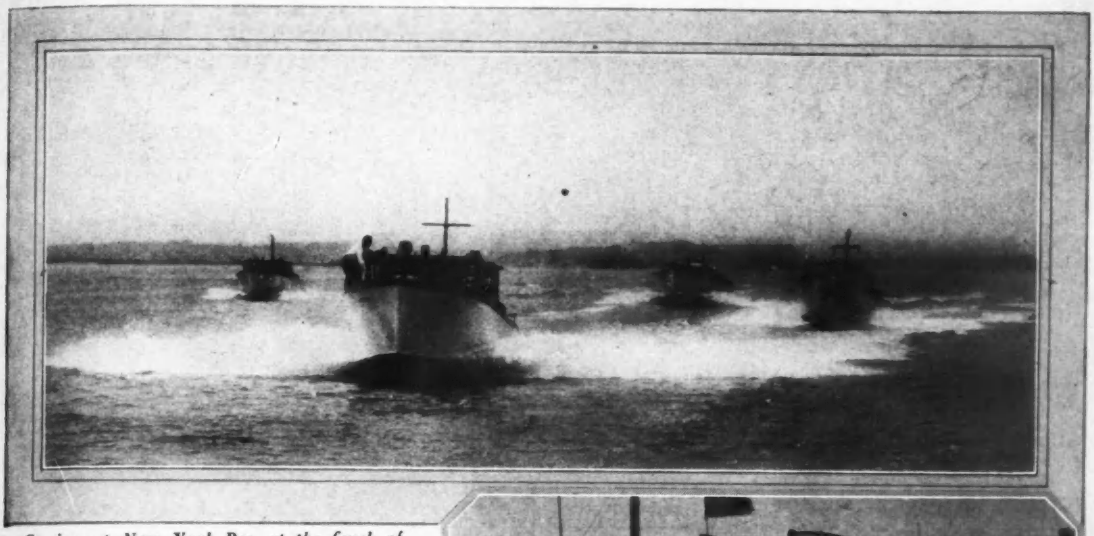
the Florida Yacht Club gives a dinner dance. The Florida Yacht Club, it is the third oldest yacht club in the United States, but they done a awful job on us. Not only did John Alsop, Mayor, make a speech, but they was even more corrupting things happened. I especially requests that everybody gets to bed early in order to make an early start, which they done. They gets to bed about three A.M.

Anyways, I shoots off the cannon on Pilgrim at 6:30 A.M. and hoists a signal showing we starts in thirty minutes. Instead, they all grunts, turns over and sleeps two hours more. By ten o'clock, five boats warms up their motors. We proceeds down the Bay to the dock of Don Fattarze. He promises the night before that he meets us at seven A.M. in command of Minim. People was running up and down the dock, but cruising nowheres. I goes ashore. The fleet comes to anchor.

I then learns that the nurse, she had fed Don Fattarze's youngest child a dose of furniture polish or something, instead of tonic or something. In any events, they has the child at the hospital on a bilge pump and for some reason Don Fattarze refuses to start until he knows the results. In fact, Chap, Don Fattarze gives me no end of trouble on the whole trip. Everybody else, they seems to think him funny, but I doesn't see it that way.

By the time they gets the child pumped out, Ben Hazelton of Toledo, co-owner of Ariel, he disappears. I talks with Avery Wright, other co-owner. He says as how Hazelton, he mutters, "If it

New Moon—Left to right, E. J. L'Engle, Cynthia L'Engle, Mrs. R. B. Shields of Jacksonville and E. Allen Wood, owner



Coming up New York Bay at the finish of the Fairform Flyer cruise

will do that to a child, what will it do to an adult," and goes off in search of more of the furniture polish. I understands that that is what they drinks in Ohio.

With this, we pushes off—five boats—leaving the Ariel and her furniture polish behind. Along the middle of the afternoon, we completes our hundred miles and ties up at the Sea Island Yacht Club, Georgia. In case they is anybody in the world what has not heard of Sea Island and St. Simons Island what Howard Coffin has transformed into a regular Paradise, and where Calvin Coolidge and other notables shoots things and stuffs oysters last winter, I wants to tell them about it.

It is a place where they has reduced hospitality to such a fine art that if you ever stops there, you is apt to stay there indefinite. I finds it so. We no sooner ties up to the fine dock of the yacht club than Commodores Jones, McKinnon, Messick and Schuh crashes aboard with the keys to the islands. In no time at all, everybody was up to the clubhouse drinking tea so loud you could hear it for miles. They then gives Don Fattarze five minutes to change from his shorts to his longs, and drives us over to the Cloisters, where Managing Director Roy Baker greets us with a smile a yard long.

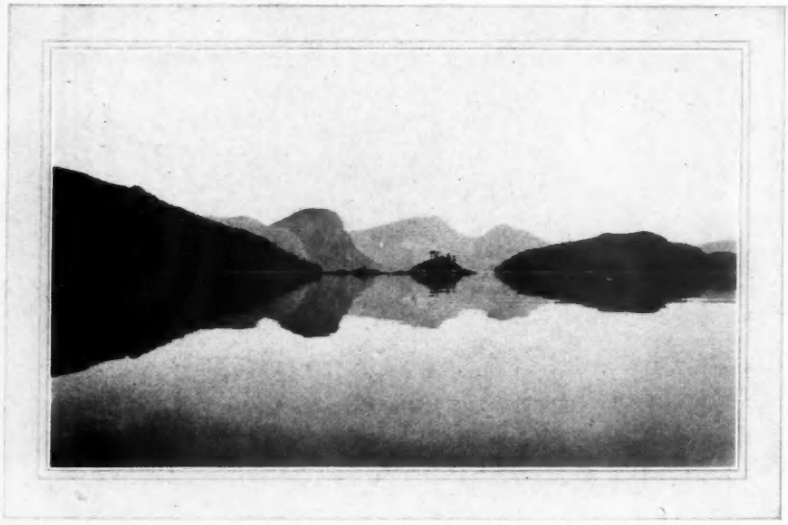
More tea was served while some people looked at the fish in a aquarium while others played that brutal game of pingpong. The dinner dance what they then give us lasted most of the night. The only other thing what happened that night was

(*Continued on page* 102)

Minim—Left to right, Kenneth Hunter, Jacksonville; Mr. and Mrs. Don M. Barnett, Jacksonville, and Capt. Pinner

Ariel—Left to right, Mrs. P. M. Clarkson, Avery G. Wright, Owner; Mrs. Charles Bettes and R. R. Shaw

Tesćildot—Left to right, Alex. M. Ronald, Boston; Capt. and Mrs. Henry S. Baldwin, Brookline, Mass; Miss Mary Ronald, Boston, and Mrs. Wm. H. Baldwin and Joe Livesay of Jacksonville



Scene on Johnston Straits

FROM THE STATES TO ALASKA

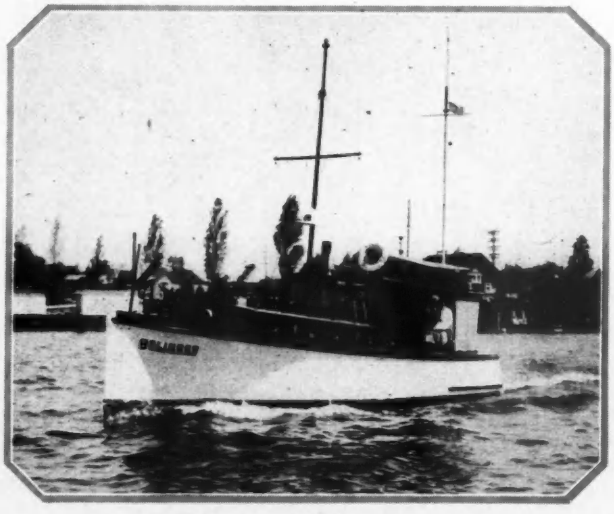
Second Long Distance Cruiser Race of Over One Thousand Miles

Repeats Success of Previous Year

By ROY A. PALM

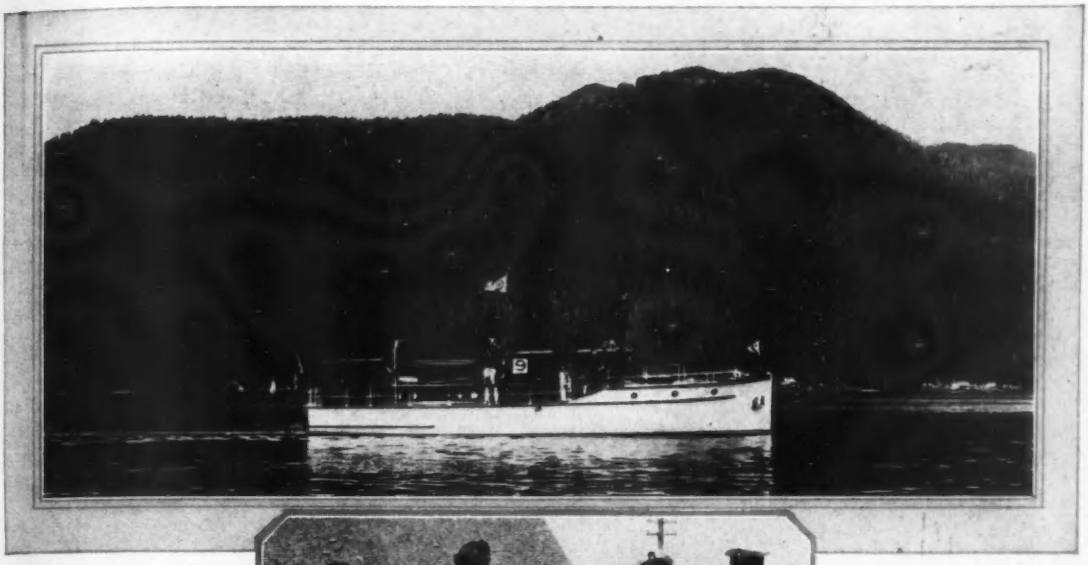
BANG—goes the bomb notifying us that in five minutes the starter's signal will be given and the thousand-mile yacht race from Olympia, Washington to Juneau, Alaska, will be on again for the second time. This is the Second Annual Capitol to Capitol Yacht Race sponsored by the Chambers of Commerce of the two cities mentioned above.

After the hurry and hustle of getting everything in readiness for the long grind ahead of us it is quite a relief to settle down to the regular routine of the five day race. There are ten boats entered in this race and they start from Olympia on their handicap which is based on the speed at which the various captains have elected to run. This varies from seven to ten miles per hour. The author happens to draw a berth on a boat entered at eight miles which means that a number of the other boats have already been on the way from eight to sixteen hours, when we cross the starting line. During the trip ahead of us through the famous inside passage to Alaska there are numerous narrow passages where the tide may run as high as ten or twelve knots and stretches of open water where the waves and winds from the broad Pacific Ocean reach in and cross our course.

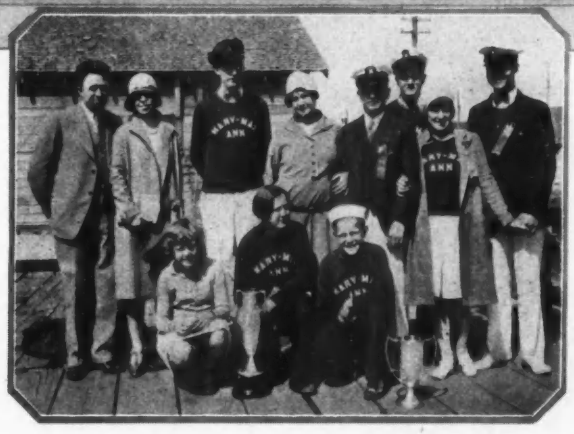


Bolinder, Winner of Free-for-All First in small class Longest Non-Stop Run

The first of these hazards, if we may borrow a golf term, is Deception Pass, where the tides sweep through to fill the northern part of Puget Sound. Each boat is allowed a maximum lay-over period of sixteen hours to be taken whenever the skipper of the boat figures it will be to his advantage to do so. When we reach this pass we have already taken three and one-half hours of this time and we arrive at slack low water which is a good time and consequently we go through without stopping. Some of the other boats on their arrival here elect to lay up just inside the pass and wait for a favorable tide to go through on. The next problem ahead of the boats is Pole Pass which



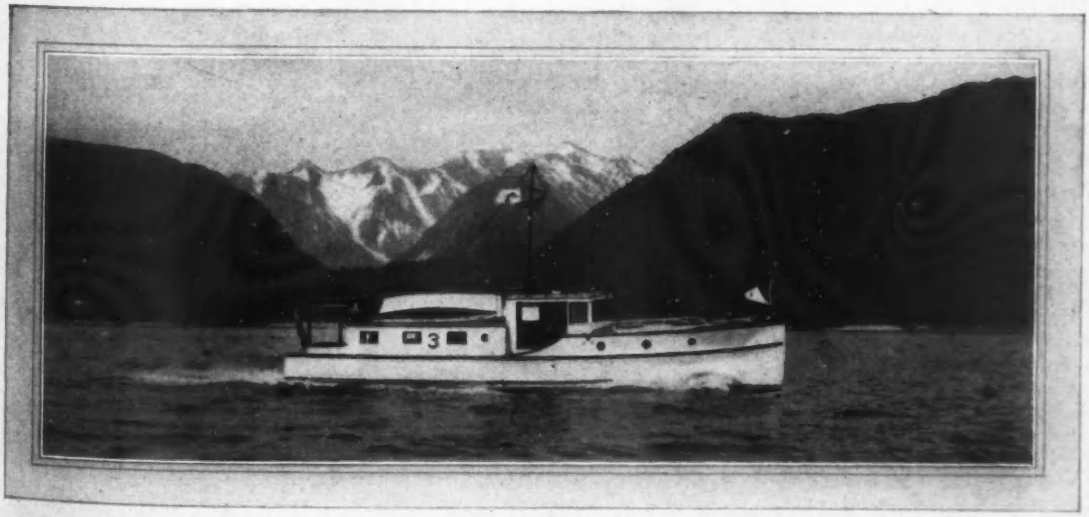
Mary-Mcr-Ann, winner of first place in the large class



Winners in the Large Class

is a small passage not on any regular boat route and has been inserted by the race committee to test the resourcefulness of the skippers in figuring out conditions at a point that is not covered by any of the handbooks or other aids to navigation of these waters. He must take his charts and determine from them the proper time and the proper way to navigate this stretch.

After successfully passing this point there is comparatively smooth sailing for the next fifty miles when we arrive at Dodds Narrows, which is near Nanaimo, B. C., on the Southern part of Vancouver Island. It happened to be the author's turn at the wheel and the time was midnight when we arrived there. This pass is very narrow and makes a sharp turn to port, consequently no open water can be seen ahead at night and it was with a great deal of misgiving that we approached this point. A friendly beacon on the West shore, however, assured us that our course was right and so we continued on through in spite of the fact that a three-knot tide was running against us. From here we pass out into the Straits of Geogia, which is a stretch of open water for a distance of about a hundred miles at the northern end of which lies Seymour Narrows, where the tide may run from ten to fourteen knots at its height. After crossing



Kittiwake of Olympia

the straits with a strong favorable wind at our back we encounter the incoming tide at this point, but decide to go through in spite of some very severe tide rips which we could see ahead of us. After bouncing around and literally standing on end at times, we succeed in getting by this point and the narrows proper, where we find a favorable tide and protected water for the next hundred miles or more. This brings us to Queen Charlotte Sound, which is a large body of water opening directly out to the Pacific Ocean. When we arrive here we find the weather very calm and with the exception of a ground swell, the water here was as smooth as a mill pond. This body of water is always in motion regardless of wind or tide. The heavy swells from the Pacific Ocean roll in and the Sound is a comparatively shallow body of water. The author does not mean to convey the idea that there is any danger of the boats running aground as the average depth is probably about fifty fathoms, but this is shallow enough so that the ground swells are increased in size as they enter this area.

Ann Siedelhuber with the Governor's Cup and the Queen City Cup won by the Mary-Mar-Ann

Roy A. Palm, Engineer of the Bolinder and official photographer

Mayor Ohmer of Petersburg

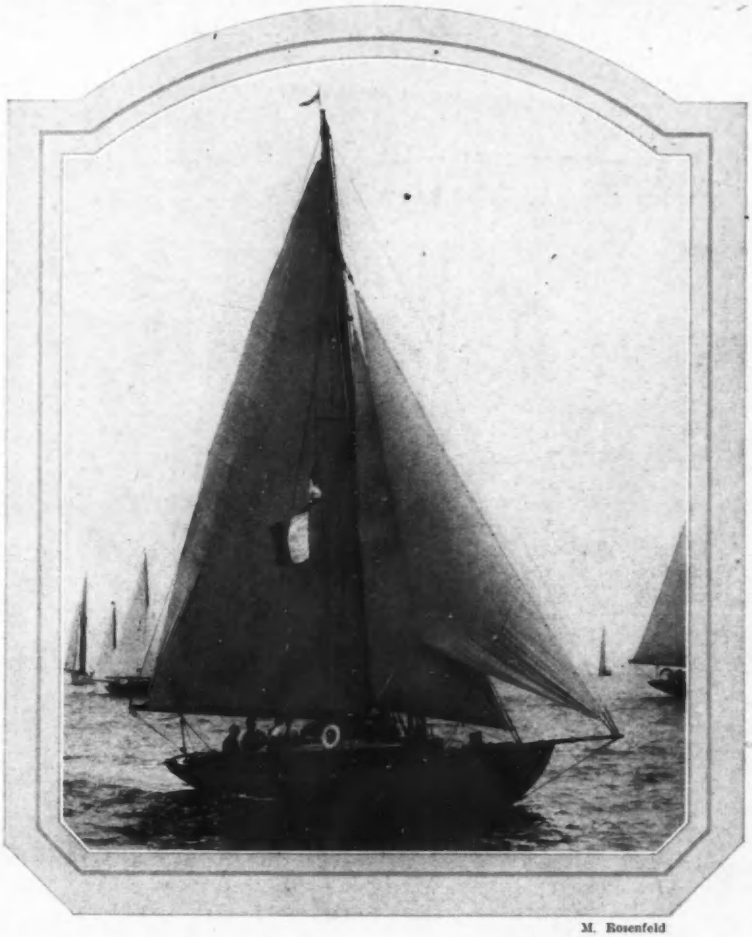
Queen Charlotte Sound marks a dividing line in the course of this race as the scenery and even the waterways themselves seem to change all their characteristics at this point. The district to the north has a yearly rainfall of over two hundred inches and this is distributed throughout the year with the result that wherever the Rocky mountain sides are covered with the least trace of soil they are covered with a luxuriant growth of evergreen trees and some of the areas exposed to the heavy winds look like a fairyland forest due to the fact that the trees have been dwarfed and may be hundreds of years old, although actually a scant six or eight feet in height.

From here the course leads up Fitzhugh Sound and Lama Passage past the village of Bella Bella and out into Millbank Sound, which is the next stretch of open water that must be crossed by the yachtsmen before getting into Finlayson Channel, Graham Reach, and Grenville Channel. These three are mentioned together because they are part of a long narrow channel covering a distance of over ninety miles. These passageways appear on the chart a though they were a system of canals dug by man. The width varies from a quarter to a half mile and they are so straight that at almost any point it is possible to see ahead or behind for a distance of at least ten miles. These channels usually do not get rough under any kind of a storm, but there is a strong tidal current which enters this stretch at both ends and meets in the middle. It is possible for a boat to so plan its time of arrival at the meeting point of the tides that it may run in with the flood tide from one end, and have the ebb tide to boost it along running out the other end. The northwest end of Grenville Channel leads us into Dixon's Entrance, another stretch of water opening out to the broad Pacific, but somewhat protected by an almost continuous fringe of islands. The sea seemed to be in a very good mood when we arrived here and we glided along very smoothly over long lazy ground swells, much the same sensation as rocking back and forth in a mammoth arm chair.

Ketchikan is now in sight and we will soon be tied up at the oil dock for the first fuel that we have taken on since the start. We lay up here for a few hours and the crew is allowed to go ashore and try their sea legs on solid ground again, and find much to their surprise that the rolling sensation still continues even when standing still on the cement walks of Ketchikan. Such is sea life, hard to get accustomed to (particularly for those subject to mal-de-mer) and almost equally hard to break the habit when ashore again.

From Ketchikan we pass up Clarence Straits and through another wonder spot of the trip. This is Wrangell Narrows which used to be a narrow tortuous problem in navigation in which even the most experienced skippers were prone to run aground from time to time. However, this has all been changed now. The channel has been dredged until there is plenty of water at all stages of the tide and the buoys and markers are so thick now that one forgets all other worries in trying to avoid hitting these aids (?) to navigation. With all due respects to the work of the government in dredging and marking this channel, we must acknowledge that is a wonderful improvement in a passageway which

(*Continued on page 120*)



M. Rosenfeld

The 32-foot overall cutter, just completed for Alfred F. Loomis, popular contributor to MoToR BoaTING'S *columns*

AL LOOMIS' CUTTER HOTSPUR

New Deepsea Craft Similar to the Famous Hippocampus Which Will be Used by the Popular Author for Extensive Foreign Cruising

DESIGNED for Alfred F. Loomis by J. Linton Rigg, the auxiliary cutter Hotspur exemplifies the latter's ideas of a small cruising boat with good windward ability. Built at the yard of Ollendorff, Inc., at Saugatuck, Conn., she was commissioned just in time for participation in the Gibson Island race. She will be further used on the Sound during the summer, and next spring Mr. and Mrs. Loomis plan to ship her to Greece for a long cruise in the Aegean Sea.

This contemplated cruise governed to a great extent the size and accommodations of the new cutter. She is large enough for extended offshore cruising with perfect safety, and yet small enough for comfortable handling by two persons. Although carrying 5,000 pounds of lead on her keel, she is light enough to be picked up by the average ten-ton crane which will be found in foreign ports. The design also was influenced to some extent by the uses to which Hotspur will be put, the keel being long to simplify cradling when the cutter is placed on a steamer's deck.

This new cruiser measures 24 feet on the waterline, 32 feet over all, 8 feet 10 inches beam, and 5 feet 3 inches draft. Her draft and waterline length correspond closely to the dimensions of the yawl Hippocampus, in which Mr. Loomis made his cruise to Panama eight years ago. But the over all length is four feet greater, while the beam is about a foot less, these differences making for better speed and higher pointing. The lines, as worked out by Linton Rigg and faired by Chester Nedwidek, are particularly happy.

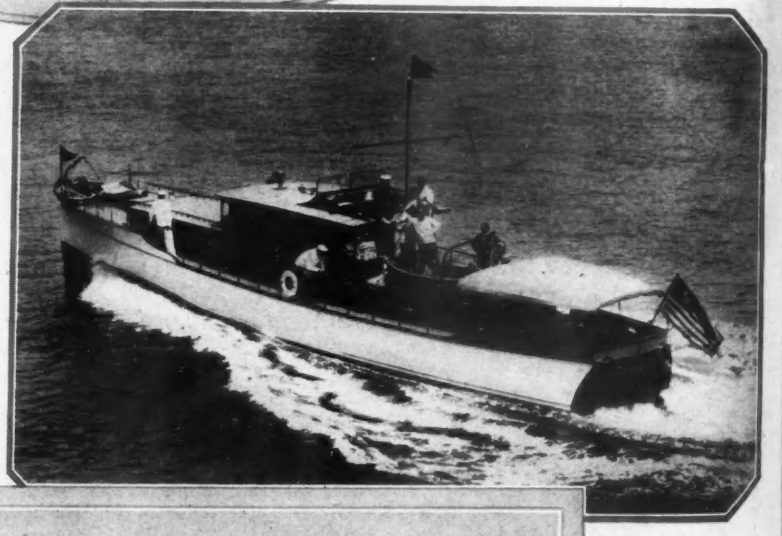
The Marconi rig with which Hotspur is provided is not yet considered ideal for ocean cruising, and many critics will consider the cutter a step backward from the yawl for ease in handling. However, it was the owner's desire to try this rig in independent cruising, while the roller reefing gear with which the main boom is fitted will simplify the important business of shortening sail in a hurry. (*Continued on page* 106)

NEW LONDON PLAYS HOST TO

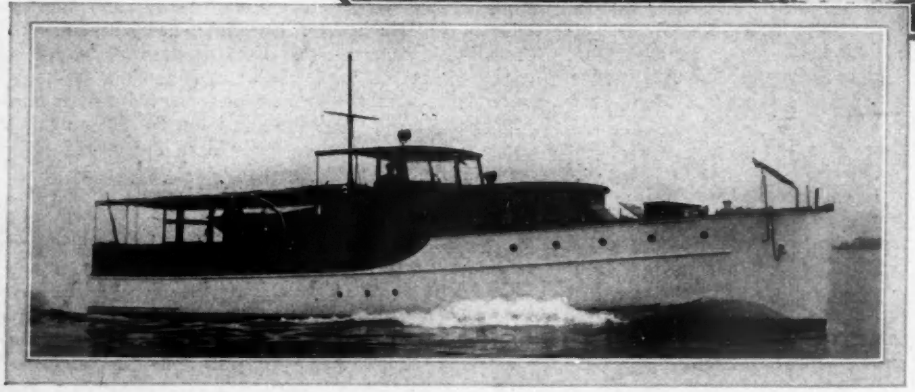
Famous Rowing Races on the Thames River Attra

Crowds on the shores enjoyed the brilliant spectacle of the country's finest yachts assembled on the Thames River at New ondon for the collegiate regatta

Thomas C. Eastman of New York entertained several guests on his new speed cruiser Peacock III which was built for him by the Luders Marine Construction Company. She carries two six-cylinder Wright Typhoon marine engines



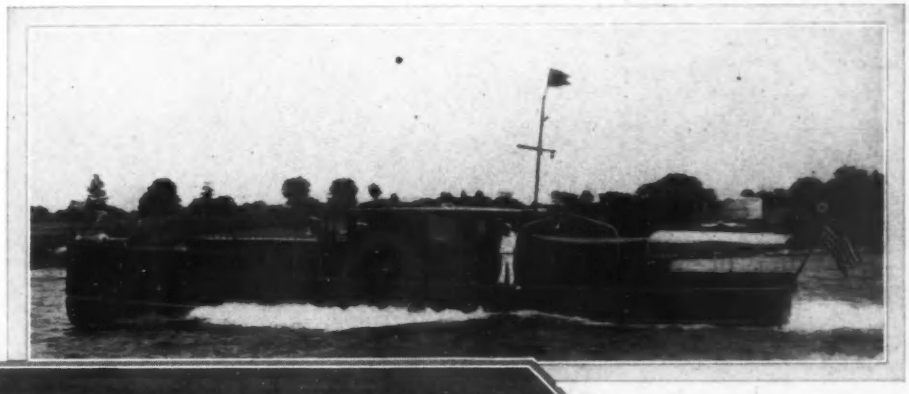
Another newcomer was Auriga built for Leonard K. Yerkes of New York by George Lawley and Son Corporation. She is 68 feet in length and powered with two six-cylinder Sterling engines



Photographs by M. Rosenfeld

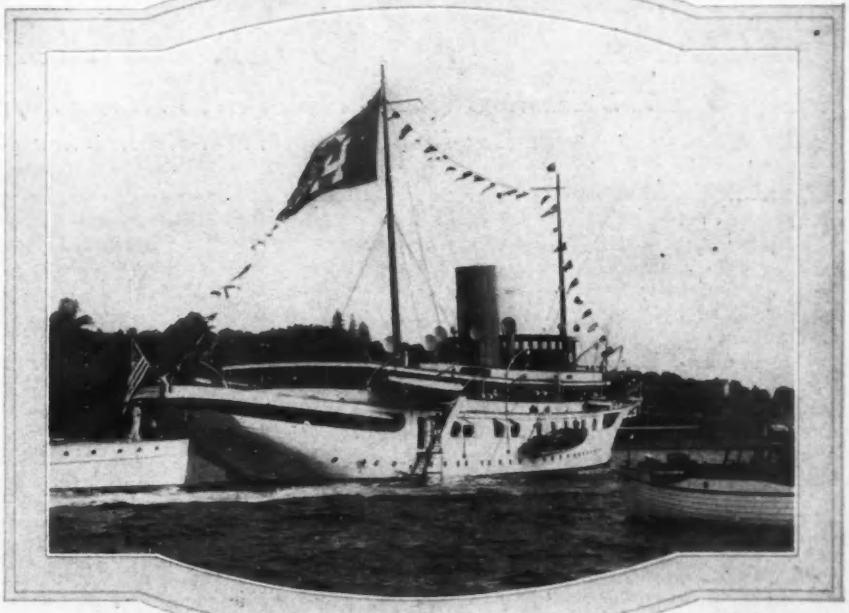
TO SEASON'S NEWEST YACHTS

Attra Immense Throng of Visitors in Many Fine Craft

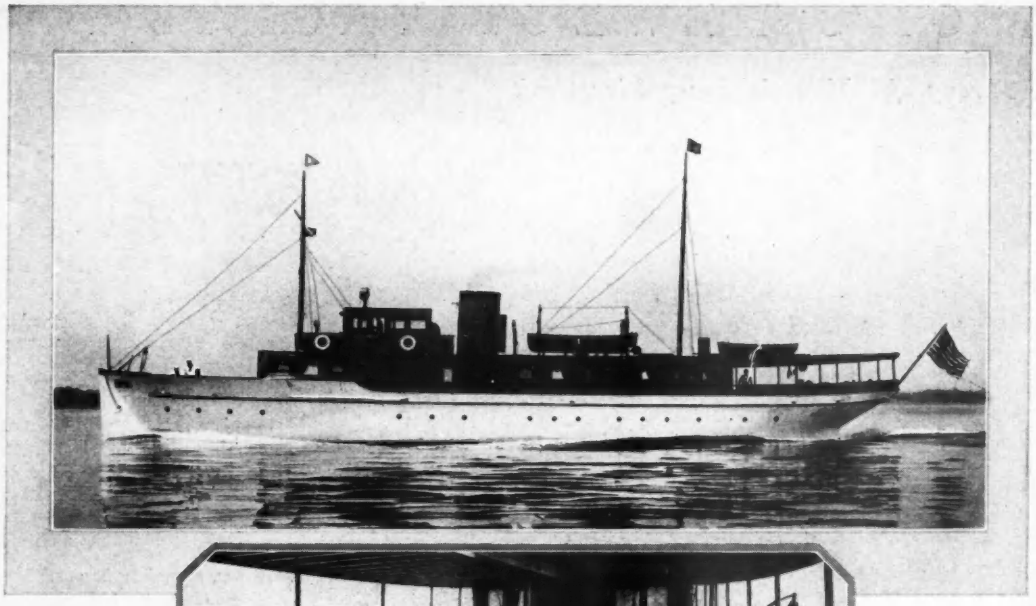


Eepee, owned by Edward Plaut of New York, also carried numerous guests to the races. She is a new 72-footer powered with eight cylinder Sterling engines and built by the Luders Marine Construction Company

An exceptional speed cruiser is Aphrodite built for John Hay Whitney of New York by the Albany Boat Corporation. Her pair of twelve-cylinder Wright Typhoon engines drive her at high speed



Viking, the new 272-foot yacht completed for George F. Baker, Jr., this year from T. D. Wells' designs by the Newport News Shipbuilding Company entertained many guests and made liberal use of her fleet of small motor craft



The continuous deck house accentuates Perciana's graceful and pleasing lines. She is 120 feet long over all

The spacious after deck is well protected and suggests the accommodations of a much larger craft

PERCIANA IV—A MODERN DIESEL YACHT

This Luxurious 120-Footer for Percy L. Hance Represents the Last Word in Fine Yacht Construction

PERCIANA IV, one of the newer Diesel-powered yachts coming from the boards of Tams and King, is a particularly attractive craft. The most casual glance immediately reveals the pleasing lines and a few minutes spent aboard disclose the care which her Boston builders, the J. M. Densmore Company, have put into her construction.

In appearance, Perciana is of the plumb stem and overhanging stern type, with a continuous deckhouse. In length, she is 120 feet over all on a water line length of 111 feet 3 inches. Two eight-cylinder Winton Diesel engines of 325 brake h.p. each drive her at 17 knots.

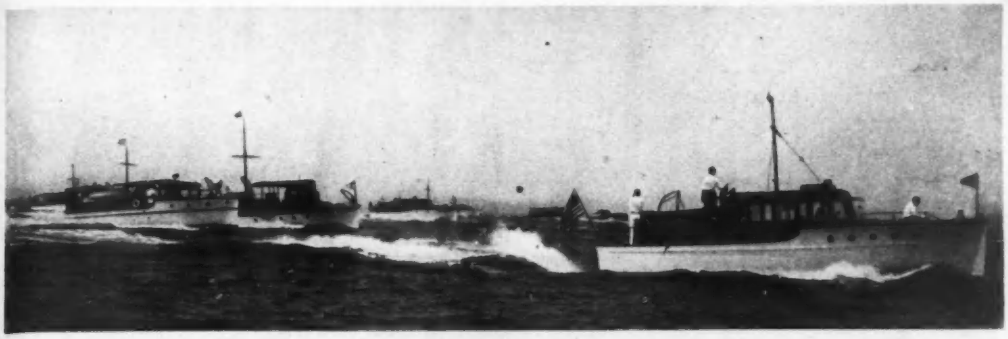
The engine room is located amidships and enclosed at each end with water-tight steel bulkheads. Aft of this is the owner's bathroom to port, with large lockers and wardrobes on the starboard side. Aft of this comes the owner's stateroom, extending the full width of the ship, and from here a central passage leads aft with a large double stateroom on either side. A bath and toilet room aft of these lies on the starboard side with private toilet room connected to the port stateroom, and a stairway on that side leading up to the main salon above.

At this point a steel bulkhead with water-tight door crosses the ship and immediately aft of it a large gymnasium is located, which also extends the full width of the boat. Aft of this is a large storage room.

Forward on this lower level is a large officers' mess room with refrigerator on the port side—three staterooms for officers with a toilet room and shower separate to this room from the forecastle.

On the main deck enclosed in the deckhouse, a large dining room is located forward with the galley to port and a commodious pantry to starboard aft of it. A thwartships passageway divides these quarters here from the owner's bathroom and wardrobe with an inside passageway aft to the owner's stateroom. The after end of the deckhouse just abaft the owner's room is taken up with a large main salon.

M. Rosenfeld



Seventeen cruisers cross the line at practically the same time and created a tremendous disturbance on the waters of Long Island Sound

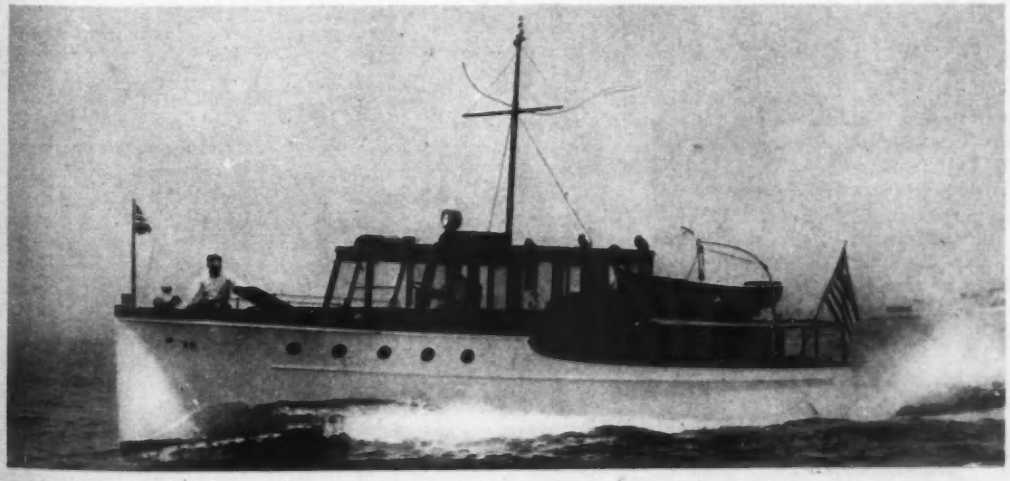
NEW CRUISER RULE A SUCCESS

Block Island Race Furnishes the First Test of New Rule and Produces Surprisingly Close Results. New Sea Dream IV Wins the Race

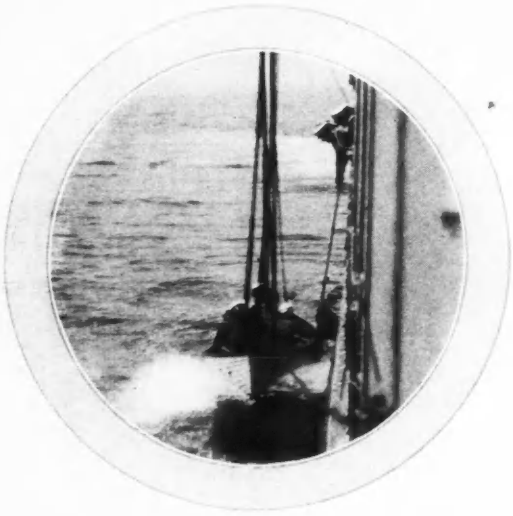
By F. W. HORENBURGER

THE first real test of the new 1929 cruiser handicap measurement rule has conclusively proven that the American Power Boat Association has at last devised a rule which is as nearly perfect as possible. The cruiser race of the New York Athletic Club to Block Island over a distance of 100 nautical miles furnished the setting for this test. Seventeen cruisers of assorted types and kinds took part and ratings for all had been computed under the 1929 measurement rule according to the formula 2.25 times the horse power, divided by the midship section, plus 31. The produced a series of ratings which ran from a low of 36.90 to a high of 60.85 and corresponding time allowances up to a maximum of over five hours. The fact that weather conditions were practically ideal for such a long trip helped in the close result since there was no reason why a boat could not maintain an excellent course and hold it throughout. The corrected time of finish of the first four boats differed only by a matter of one minute and forty-three seconds. The first six were within ten minutes of each other while the remainder, with a single exception all finished within one hour and thirty-five minutes of the leader. Never before have the corrected time results in a race of this character been so close together.

The race this year was the twentieth of its kind held by the Yachting Department of the New York Athletic Club. A race for sail boats over the same course is in its twenty-fourth year and eight sailing vessels competed again this year. The sail boat division was started promptly at twelve o'clock noon on July 13 and followed precisely one hour later by the large fleet of seventeen motor boats. Among those whose opinion could be considered of value, G. DeF. Larner's new Elco cruiser, Sea Dream IV and Revelation, a 50-foot cruiser owned by T. F. Egan, were considered as having the best chances. Some doubt existed whether Sea Dream IV would be able to complete the course without difficulties since she had been launched the day before the race (*Continued on page* 138)



The new Elco cruiser Sea Dream IV launched one day and winner of the Block Island Race the next



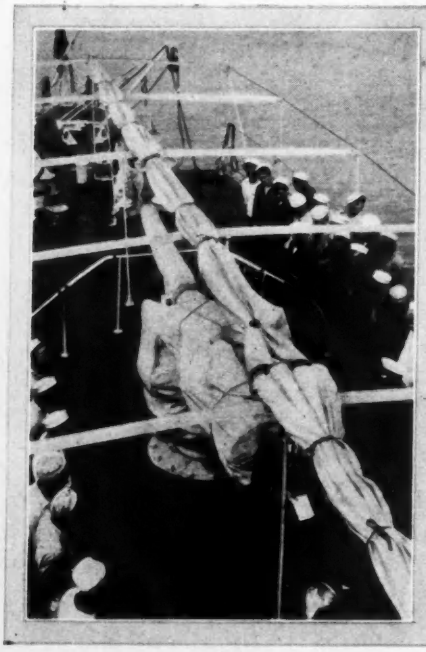
In the man overboard drill the small boat is launched and on its way before headway is lost

THE WORK OF THE COAST GUARD

Constant Watch and Patrol of the Coast Makes the Sea Safer for Yachtsmen with Efficient Aid Ready for All Emergencies

By F. W. HORENBURGER

THE unfortunate collision between a small coast guard cutter and a passenger steamer near Boston recently may prompt many persons to ask why the Coast Guard vessels are under way under conditions which prevailed at that time. The first mention of Coast Guard immediately brings up visions of rum-runners in the popular mind. To those not acquainted with the work of this vast organization it may come as a surprise to learn that the suppression of the rum-running activities is to some extent the least important of their numerous duties. The law under which the Coast Guard operates provides that it shall constitute a part of the military forces of the United States operating under the Treasury Department in time of peace



The crew assembled on the forecastle head receiving instruction from the skipper

It is quite a task to put the heavy motor boat over the side

Boats are loaded to capacity when the abandon ship drill is carried out

Even the Balsa life rafts are put over. Getting them back on board is a problem

The long pier at Staten Island, Coast Guard base for the New York District

and as part of the Navy in time of war. It is so effectively organized that it is prepared to pass over into the Navy immediately when necessary and in the many conflicts in which the country has been engaged it has always performed creditable service as a part of the Navy.

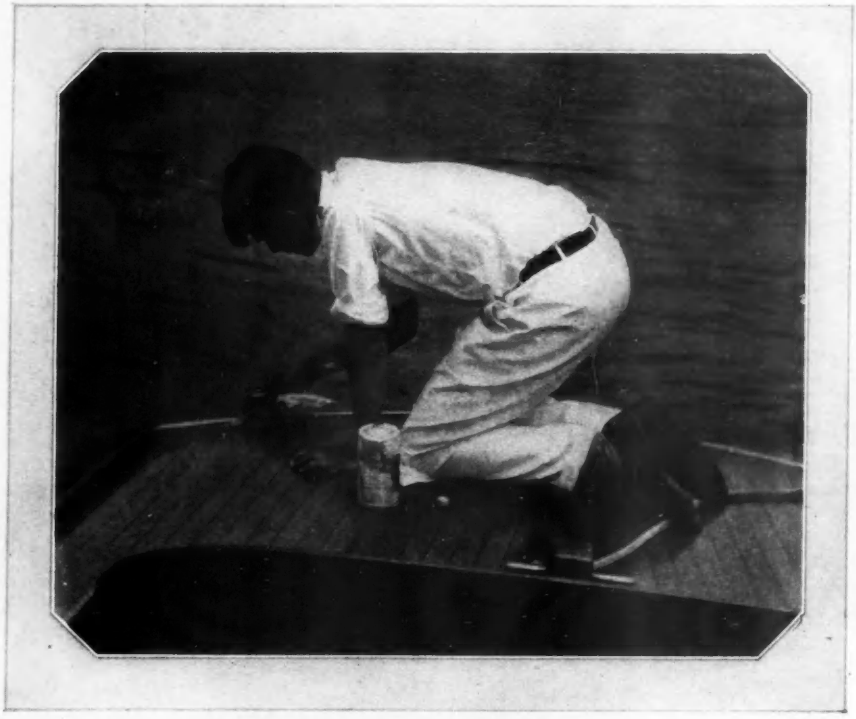
Rear Admiral F. C. Billard, Commandant, explained in a recent issue of the *United States Naval Institute Proceedings,* that the present Coast Guard was known originally as the Revenue Marine and later as the Revenue Cutter Service. An act of the first Congress, signed by President Washington on August 4, 1790, created it and placed it under the Treasury Department. At that time there was no Navy Department. During the early days of the republic many important naval operations were carried on by ships of the service while the country was in difficulties. In January, 1915, the Life Saving Service was united with the Revenue Cutter Service and renamed the United States Coast Guard. As the name implies, the service is the guardian of the coast by means of its vessels offshore and its many stations along the beach. Its peace time duties are many and varied, most of which are humanitarian in character. The most important of these can be considered the saving of life and property at sea, which is its most outstanding task. Some three thousand persons are rescued from peril in the course of a year and the number of vessels assisted will average close to 2,500 per year.

The necessities of the work of the Coast Guard develop seamen of the first order. Crews which are constantly engaged in rescue work afloat, in searching for derelicts and destroying them, keeping track of wandering icebergs on the International Ice Patrol, in cruising along the uncharted Alaskan coasts, and in enforcing the laws of the country at sea, must necessarily acquire good judgment, skill and other essential characteristics which fit them particularly for this arduous service.

In order to train young men for service with the Coast Guard, an academy is maintained at New London, Connecticut, which parallels very closely the work of the U. S. Naval Academy at Annapolis. Courses of instruction are designed to fit students for a future service at sea and develop the boys in mind and body for their future work. A practice ship is available for cruises and is handled under sail and power in all weathers. Special stress is given to training in seamanship since this is a most essential requirement. Practical navigation is also one of the major subjects and all modern methods are studied.

A constant patrol is maintained along the entire coast and this has for its purpose the prevention of smuggling, which includes not only the rum situation, which is the only one the newspapers seem to be aware of, but also other forms of contraband, aliens, narcotics and other forbidden merchandise. Also the fact that the ships are in constant communication with headquarters and each other by radio permits them to be fully informed as to the whereabouts and mission of every vessel within the area they are watching. In the event of a collision or ship in distress it is a simple matter to direct several relief ships to the scene and those used in the offshore patrol are still able and speedy craft.

At the close of the World War the Navy Department placed on the retired list a large number of destroyers which had been (*Continued on page* 80)



M. Rosenfeld

Shining brass adds much to the appearance of any boat

WHAT THE NOVICE SHOULD KNOW

The Care and Operation of the Engine, with Pointers Regarding the General Maintenance of the Boat Throughout the Summer

By W. H. KOELBEL

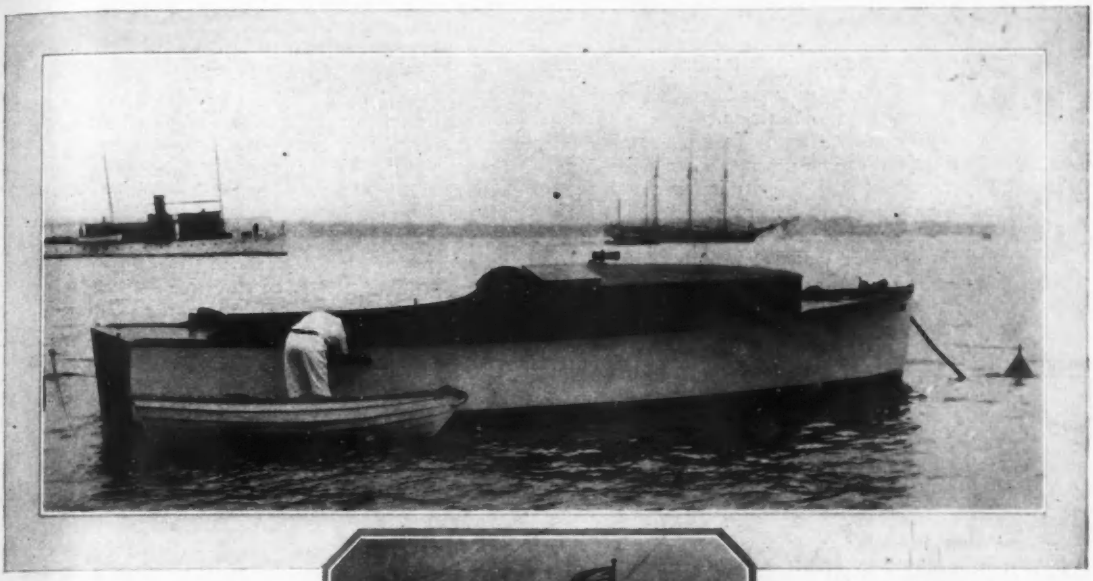
PART V

IT HAS probably occurred to the reader that the maintenance of a boat is going to involve a certain amount of care and service in order to keep it in the best of condition at all times. Evidence of that care is found wherever we look among a fleet of yachts, with their glistening hulls, shining brass, and every detail of equipment in perfect order. Every yachtsman takes particular pride in the appearance and performance of his boat and gets real enjoyment out of doing those little odd jobs required from time to time to keep it ship-shape.

After all, the successful maintenance and operation of a boat resolves itself down practically to a proposition of keeping everything clean and orderly. While orderliness is a very desirable quality ashore, it becomes absolutely essential aboard a boat. Anchors and lines must be kept ready for instant use and every other item of equipment must be in good condition and readily available. A half hour spent occasionally in tightening up nuts and bolts about the engine and removing grease and moisture, particularly from wires and electrical parts, may very probably save hours of work some time when engine trouble would prove embarrassing. A few drops of oil applied at the proper time and place often save an expensive repair job later. Cleanliness and proper lubrication are the chief requisites for the engine; ample protection from the weather for the hull.

Modern marine engines have been developed to a point of reliability and simplicity where the man of average mechanical ability can run one with the same assurance that he runs an automobile. With a periodical overhauling by a competent mechanic, the adjustments necessary for ordinary running are few and simple, and with these he soon becomes familiar.

Proper lubrication is one of the most important considerations. The operator of an engine will find that it pays him well to follow the instructions supplied by the manufacturer in regard to the proper kind of oil, the grade, and the frequency with which it should be drained and renewed. There are many good makes of oil on the market, and the manufacturer generally specifies one or more kinds which will give entire satisfaction. Don't be satisfied in buying oil to get anything, regardless of its quality or suitability to your engine, but stick to the kind recommended as best by the engine builder. The more often it is changed, the less wear and tear will be suffered by the engine.



A washing down now and then will keep the topsides spotless

Don't forget the engine controls when polishing the brass work

Money spent on lubrication is well invested and is always cheaper than replacing burned bearings and doctoring up scored cylinders.

A gauge is provided on all modern engines to show the proper level at which the oil should be kept and generally at the after end of the rear main bearing, a felt washer and nut is arranged to prevent leakage. This should be inspected occasionally and taken up if necessary. Small pumps are often attached to the side of the engine to facilitate the removal of old oil from the crankcase where the drain plug is down in the bilge, and on engines that are not equipped in this way, it is a good idea to devise something of the sort, as otherwise this important duty is likely to be neglected on account of the difficulty of the job. Oil coolers have also come into quite general use and perform the function of keeping the temperature of the oil down to a point where its lubricating qualities are not destroyed by the heat.

The older two-cycle engines were generally equipped with quite a number of oil and grease cups for cylinders and main bearings, but today there are very few cups which require attention, most parts being lubricated directly from the one system by pressure or gravity. If there should be any cups, they should be kept well filled and given an occasional turn or two.

Regardless of the system of lubrication employed, when the engine is run each bearing should be provided with plenty of oil and care should be taken to prevent dirt and grit from getting in, as the bearings would otherwise heat up and quickly be ruined. Too little oil will not give proper lubrication and there will be a tendency to overheat, while too much oil makes a smoky white exhaust, leaves a deposit of carbon in the cylinders and fouls up the plugs. With the pressure system, there is little to worry about as long as nothing is permitted to clog the lines and a good supply of clean oil is provided. With the mechanical type of oiler, the feed to each bearing and cylinder must be individually regulated.

The practice of mixing oil in the gasoline is generally confined to two-cycle motors, although occasionally a new four-cycle motor is broken in, using a small quantity of oil—about a pint to five gallons of gas—in the fuel in addition to the regular lubrication. This is generally conceded to be beneficial with a stiff engine but must be discontinued as soon as the engine is run in on account of the tendency to foul the cylinders with carbon. Outboard motors, most of which are two-cycle, are almost universally lubricated with oil in the gas.

Except for the occasional change of oil, a motor which is in good mechanical condition will require little more than a thorough cleaning from time to time together with an inspection to see that all bolts and nuts are tight and that no connections are loose. This cleaning is not merely a matter of appearance alone, as most cruiser engines today are housed under a box or hidden beneath a floor, or some similar arrangement which conceals them effectually from view. Wires soaked with oil and moisture are a common source of engine trouble and very often the perpetual condition of dampness about an engine is directly traceable to a lack of adequate ventilation in the engine compartment. If the engine is cleaned regularly, any slight adjustments which might be necessary will probably

be caught and tended to before they develop into anything serious. With the engine covered with grease and dirt, the process of making repairs is not a very attractive job, and the tendency is to neglect everything until some part refuses to function.

It is a very simple matter to take a rag once in a while and wipe the engine down. Then when everything has been cleaned off, a few minutes may be spent to advantage with a screw driver and wrench, tightening cylinder head bolts, base bolts, and all other points which are likely to be loosened by vibration. Don't forget to take up on the lag screws which hold the engine on the bed. If these are loose, the engine has a chance to vibrate excessively. Modern engines generally have their flywheels bolted to a flange on the crankshaft, but if your motor has its flywheel secured to the crankshaft with a key, be sure that the key is kept tight. A loose flywheel will make an engine sound as though it were falling apart. Never use a Stillson wrench on square or hexagonal head nuts, unless they have been previously marred to such an extent that an ordinary wrench will not take hold. Then it is better to remove them and replace them with new nuts. If open end wrenches of the proper size are used, bolts and nuts ought to last for the life of the engine. Bear in mind that there is a limit to their strength and that too much power applied to the wrench will wring off heads and strip threads.

Engines loosen up with vibration. Spend a few minutes occasionally in tightening up all nuts and bolts

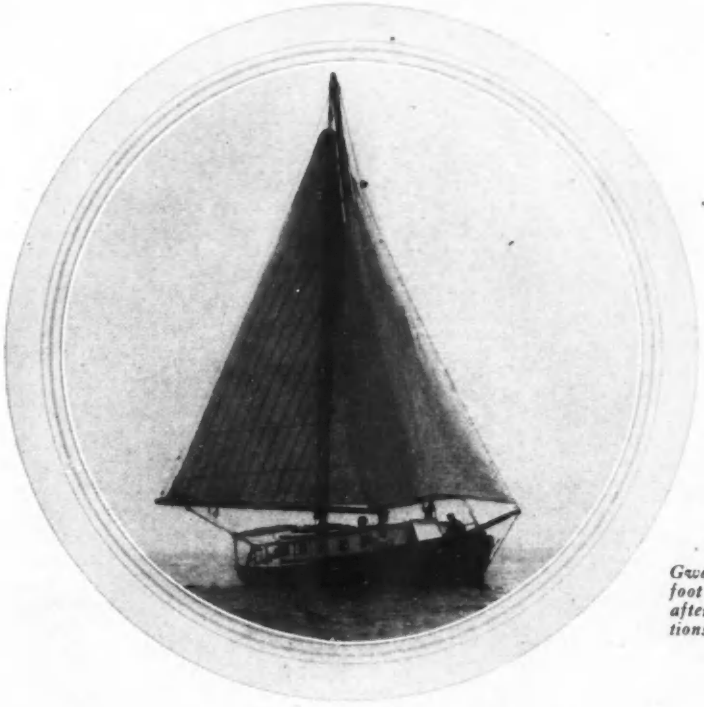
If a can of engine enamel is kept on board, any spots where the paint has been chipped off can be easily touched up, preventing rust, and making the paint job last an extra season or two. A drop of oil should be put on any moving parts which are to work freely, such as engine controls, and so on. Be especially careful to keep the distributor or magneto clean and dry and be sparing with the use of oil about electrical parts such as these. Magnetoes suffer more from too much oil than from lack of it.

All electrical connections should be given frequent attention. There is a tendency for these to work loose, with the result that the engine misses, and sometimes a great deal of time is lost in examining carbureters, spark plugs and distributors, which could have been saved simply by keeping the connections tight. Stranded wires are better than solid ones for use about a motor as they are more flexible and do not break so readily. Solid wires sometimes break inside the insulation so that the break is not apparent from the outside and causes considerable trouble. Switches also are likely to make a motor misbehave unless the points of contact are kept clean and bright and free from corrosion.

Dry cells for ignition have been largely replaced by high tension magnetoes and storage batteries with generator. Where dry cells are used, they should be tested frequently with an ammeter to see that the amperage does not fall below about eight, at which time they should be renewed. Storage batteries should be examined about once a week to see that the plates are kept covered with about a quarter of an inch of distilled water. A test with a hydrometer will indicate the strength of the battery and show when it requires recharging. The tests should be made for each cell of the battery, as one cell may be dead while the others are in good condition, and they should be made before water has been added to the cells. While examining the battery, be sure that the connections of the cables on the terminals are tight. It will be noticed that on the positive post a chemical action is set up which leaves a green deposit that eats away the metal, destroying the electrical connection, often eating the cable right through. This deposit should be frequently cleaned off, and a little vaseline spread over the terminal will help to retard the action, although it cannot prevent it entirely.

Where the boat is provided with an inside stuffing box on the propeller shaft, this should be inspected once in a while to see that it is not leaking. Leakage of a few drops while the shaft is turning is not objectionable, but with the shaft still, there should be no leak. It does not follow that a leak at this point indicates that the box needs repacking. Ordinarily, by loosening the lock nut, the packing nut may be given a turn or two and the packing will be compressed so that the leak is stopped. Don't forget to tighten the lock nut again or the box is likely to be turned off with the revolution of the shaft. If repacking is necessary, get the braided hemp of square or oblong shape which is made for this purpose, being particular to get the size which just fits your stuffing box. By cutting lengths which will just fit around the shaft, preferably with ends overlapping, as a piston ring is lapped, enough of these rings may be forced into the box to almost fill it, arranging the joints in the successive layers so that they will be staggered. Use plenty of grease on each ring and remove all old packing before putting the new in.

Sometimes, instead of hemp, candle wick is used with a waterproof grease. In this case, the wick is wound around the shaft and driven into the box, taking care that the end of the wick at the nut runs in the same direction as the nut is turned to tighten it. Two stuffing boxes, one inside and one outside, are a very desirable arrangement, as the inside one may be packed while the boat is in the water, with practically no leakage even if the outside box isn't absolutely tight. With only an outside box, if a trickle of water through the shaft hole reveals a leak, it is an easy matter to beach the boat on some sand (*Continued on page 66*)



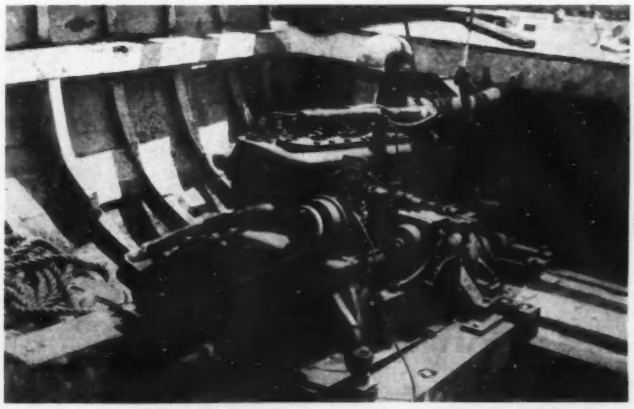
Gwemmy, the 40-foot motor sailer after the alterations were completed

THE CONVERSION OF GWEMMY

How a Forty Foot Navy Motor Sailer Was Altered Into a Seagoing Auxiliary with an Abundance of Room and Many Comforts

By CLEON C. MASON

FOR a long time I had wanted a boat shallow enough to shoot in and out of the many little coves inaccessible to six and seven feet draft; I wanted full headroom, at least six feet two inches; I wanted a lot of initial stability, I hate a boat which forever sails on one ear or the other; I wanted enough power to get along at a fair rate; I wanted room below for a typewriter desk, books and privacy; and to cap the climax of this infection of wants, I wanted it all pretty cheaply. I realized that all these features, if combined in one boat, would make a queer outfit—a boat builder told me so too!—and I knew that conversion jobs are usually makeshifts at the best, and poor ones at that.

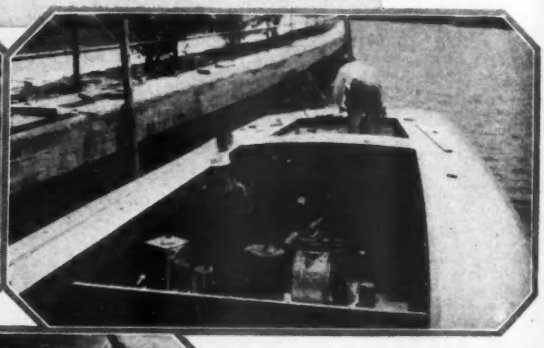


The engine installed in Gwemmy which was able to drive her 6½ real miles.

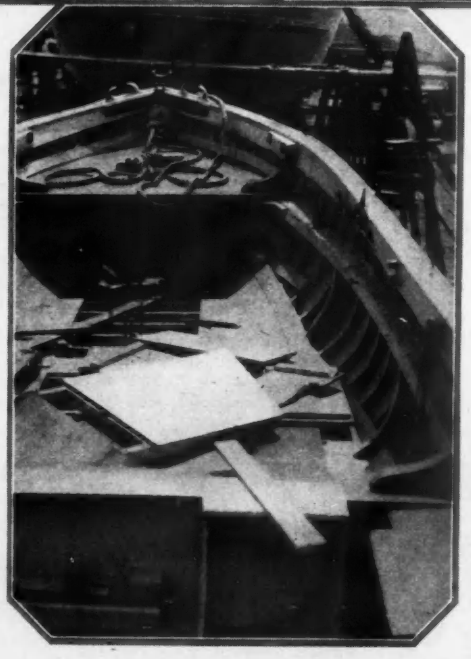
Because it was cheap and because the hull was as sound as a nut I purchased a condemned 40-ft. navy motor-sailer. These boats are the result of many years of development by the navy marine engineers. They represent a maximum load carrying capacity on a given power output; up to eight miles an hour they drive remarkably easy but I doubt if all the power in Christendom could force them beyond ten or eleven miles. They sail fairly well as they are, though the navy uses a short rig. They are built to stand the pounding and mistreatment of none too gentle sailors and the construction employed apparently satisfies this requirement. Their lines more nearly resemble the Thames barge than any other

The hull tied up in the front yard while the cabin and other fittings were added

The roomy deck space and engine under the cockpit floor



The cockpit framing before it was enclosed and decked



The sturdy construction of the original hull is shown. Frames are 2½ x 3 inches

hull with which I am familiar.

We had an old motor with Joe's reverse gear installed. This motor was also a rebuilt job, but after a year's steady use swinging a 22-inch diameter 14-inch pitch wheel at 850 r.p.m. it runs as smoothly and quietly as the first day it operated. It consumes 2¼ gallons of gasoline per hour and drives the boat an honest 6½ miles. It ran continuously for 26 hours on one trip. The entire hull was recaulked and puttied. We added 14 inches to the keel the entire length of the boat.

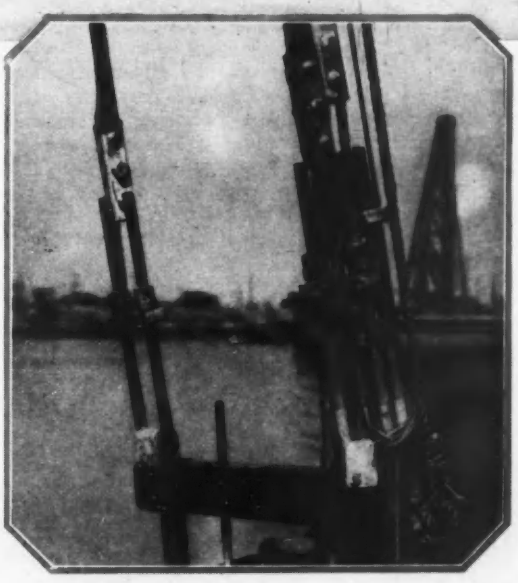
As time was no element we ran the boat into the bay, up the canal, tied her up at the front door and started work. A retired New England shipbuilder, rejuvenated by the California sunshine, saw great possibilities, so we turned him loose on the job.

The bilges were thoroughly cleaned and dried, then four and a half tons of iron punchings were packed in the center fifteen feet. Over these we poured a slop of monolithic cement, finally topping and troweling the surface to insure drainage fore and aft from the permanent central bulkhead which we had decided to leave. This weight sank the hull to the scribed water line and with the added keel gave a draft of fifty inches aft and thirty-six inches forward. We also cemented the spaces around the engine, leaving a sump for bilge pumping, and did the same thing in the bow. In the future I shall cement all boats I may own.

We were advised to tear off the gunwale plate and bolt the deck beams to the ribs, but when navy designers laid out the boat they had no such idea in mind. The top plank is oak one and seven-eighths inches thick riveted through to a sister piece inside. On top is an oak piece one and a half inches thick by six inches wide solidly riveted to the two sister pieces, copper rivets at that, old and tough. Needless to say, we left that construction alone. Instead we bolted an oak 3 by 3 from bow to stern an inch below the gunwale plate, using forty carriage bolts (three-eighth inches diameter) driven through from the outside of the top oak strake. Boring those holes through five and three-eighths inches of solid oak, blessings on the electric drill!

The deck timbers are 2¾ by 6 inch clear Oregon pine, cut with a six inch camber. The ends rest on the plate, held firm by large brass screws. The main

The windows and vents in the cabin afford ample ventilation



Sockets and U bolts were used to replace turnbuckles and clamps on the stays

strength comes from the bolting through the 3 by 3 oak stringer. Not a nail went into the framing of the entire deck. The construction is unbelievably strong. We have run the boat on sand bars, we have ridden out a couple of gales, we have rolled in an ugly chop, and not once have we ever heard the slightest creak in the hull. Every piece of wood was soaked with raw linseed oil; about twenty gallons eventually disappeared, together with two hundred seventy-five pounds of white lead.

We allowed 24 inch decks, a 10 foot working deck forward and 8 foot deck aft for cockpit. This gives ample space for gear forward, plenty of room along the cabin and sufficient for the 3 by 4 foot self-bailing cockpit aft.

The inner ends of the deck beams along the cabin are mortised into a 2 by 12 inch by 22 foot piece and are then further strengthened by long brass screws. Three-eighths inch galvanized bolts pass from the outside of the hull through this long timber every three feet. This gives a six-inch nailing space for the outside of the cabin house. The decks are seven-eighths inch tongue and grooved flooring overlaid with No. 1 steamer deck canvas laid in a heavy coat of white lead.

The cabin uprights are pine 3 by 4 inches, each bolted into place. The carlins are 2 by 4 inch bagoc cut with a 4 inch camber. All carlins are bolted through the uprights and in turn through a 2 by 4 inch stringer which is at the upper angle. Each cabin corner is supported by a 6 by 6 which goes to the bottom of the boat. The cabin sides are seven-eighths inches clear pine, tongue and grooved. The entire cabin, top and sides, is covered with sixteen ounce canvas laid in white lead and ironed out smooth. The cabin construction has never creaked, has never leaked a drop, and gives full headroom.

We used five-inch water-cooled stovepipe vents for ventilators. A good sheet metal worker made very attractive flues and waterproof caps. The four we installed cost complete less than one of the regular five-inch yacht type, are as effective, and what is more, they are useful as stovepipe holes.

The windows are 9 by 18 inches, of three-eighths inch plate glass, set in mahogany frames. The frames are bolted to the cabin

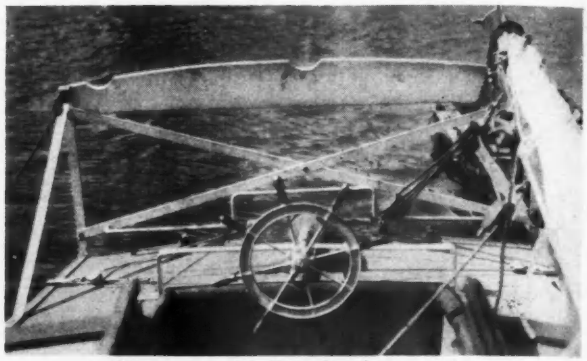
The entire cabin top was firmly bolted together

sides, completely caulked with white lead and cotton, then finished outside with mahogany quarter round set in glue. They have remained absolutely tight.

Inside the boat is more or less conventional. The main hatch is in the center directly forward of the cockpit. A small platform with steps leading down to the port side of the engine allows entrance to the forward cabins or the lazarette. Aft are the tanks, one on each side of the cockpit and one thwartwise behind, giving a total gasoline capacity of 125 gallons. Each tank has a separate shutoff valve, all three converge into a common line on which is placed an autopulse and strainer. The amount of room under the after deck is a great joy, especially for storing paints, oils, tools and the vast amount of junk any self-respecting boat ultimately collects. On the starboard side under bridge is a 15-gallon kerosene tank and just aft of that is a small six-volt generating set, built from a discarded single cylinder Johnson outboard motor and a Ford generator. It cost me just $11.00, has furnished all told not less than 10,000 ampere hours of juice and is quite my most prized contraption. I never push the starter but I get a thrill—I made it from junk and it always works, which is more than I can say for a lot I have seen.

A water tank was built into the bulkhead; it holds fifty gallons and is conveniently located.

Over the engine we built a table and covered it with zinc. On either side under the decks are capacious shelves. To starboard on the floor and near the bulkhead wall is the galley, zinc and asbestos lined and supplied with two Kerogas stoves. I have tried every cooking device ever offered for boats and find this far and away the best.



The boom rest and details of the steering gear

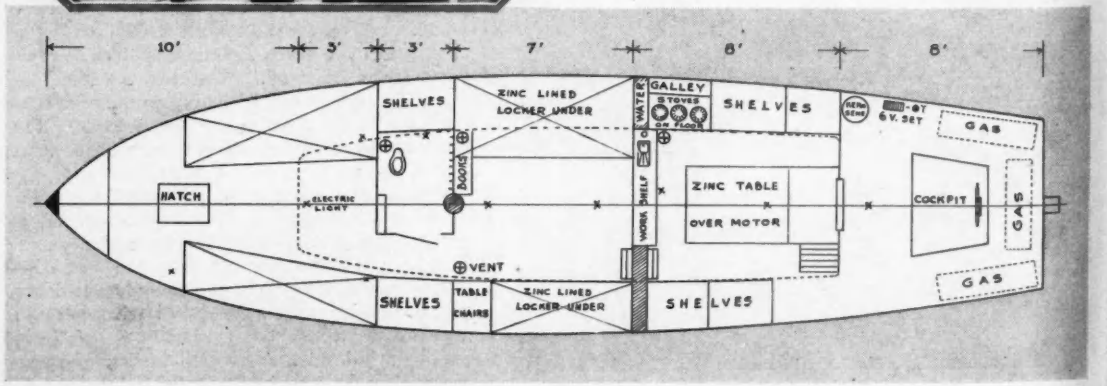
Along the forward wall of the engine room is the galley work bench with the sink and pump. As I officiate in that galley I built it to suit myself. We installed no icebox. Gwemmy is a dry boat.

To get to the main cabin it is necessary to step over the bulkhead, about 18 inches high, a little awkward looking at first but not at all bothersome. This cabin is seven feet long. To starboard is a double berth, to port a single with a zinc lined food and bedding locker beneath each. On the after wall is a 3 by 4 foot folding chart table and case, on the forward wall is a roomy book shelf and the radio. The aerial is woven copper wire on a large reel. We run it up on a flag halyard as needed. The mast is stepped partially in the main cabin.

From the main cabin forward is a narrow passageway, to port are more shelves, a table and chair locker, and to starboard the toilet, three feet wide with shelves under the deck and a world of hanging space. In the forward cabin there are two berths, a double to starboard and a single to port. Forward of these is a large storage space, the floor is cement, there are shelves for sails, ropes, ground tackle, a rack for vegetables and space for ample supplies. The interior finish is simple. The hull is unsealed, is painted white and is easy to keep clean. The upper wood is finished in clear varnish, it was all heavily oiled during construction, and has gradually darkened until the color is a soft woody tan which (*Continued on page* 142)

A corner of the galley showing the sink and pump

An arrangement plan showing how the two staterooms were provided



© Photopress London

Ralph Snoddy driver of Miss Rioco III and winner of the Duke of York Trophy on the Thames

AMERICA WINS AGAIN

The Duke of York Trophy Won Again by Miss Rioco III in International Motor Boat Regatta on the Thames, England

HIGH speed racing craft of three nations competed in an international regatta on the River Thames in England in a three-day series from June 27 to 29. America was represented by a fast 1½-liter hydroplane, Miss Rioco III, which had been built for James Talbot, Jr., Commodore of the Los Angeles Motor Boat Club, by the Hacker Boat Works of Mt. Clemens, Michigan. Ralph Snoddy, one of America's foremost drivers, was at the wheel and was most successful in his efforts in winning the three different heats, one after another, and thereby securing the famous Gold Trophy presented by the Duke of York for another year.

The occasion of the regatta was made an important one by the fine sportsmanship of the English yachtsmen and the excellent conditions under which the races were held. Every opportunity was taken to show to the American contestant every possible courtesy and assistance. The competitors from England were Newg, owned and driven by Miss M. B. Carstairs, Little

(*Cont. on page* 110)

Outboard racing at the International regatta. Competitors from many countries took part

The Hacker built 1½ liter class hydroplane Miss Rioco III, winner of all three heats

© Keystone Views

J. B. Farr, President of the Kermath Mfg. Co., builders of the engines

MILES OF ACTION

Combined Motion of Pistons in Twelve Engines Exceeds 90,000 *Miles on* 1,200 *Mile Cruise*

By HENRY H. HOWER

President, Enterprise Oil Company

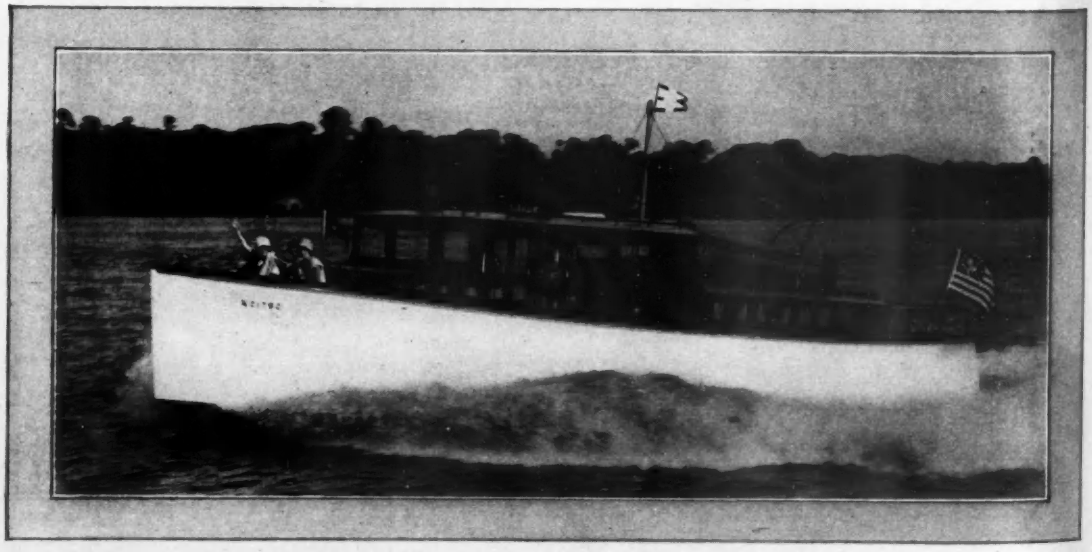
NINETY thousand miles of action!

Ninety thousand miles of piston travel—of aluminum sliding furiously past cast iron—ninety thousand miles of piston rings flashing up and down the cylinder walls!

And all of this compressed into eleven days, with no cylinder scoring, no fouled spark plugs, no gummed or stuck valves, and not enough carbon to be cleaned out!

"It sounds incredible," I said to Huckins—Frank P. Huckins of "Huck Says" fame and now equally well known throughout the world of yachting as the builder of the splendid Fairform Flyers.

I had gone up to Boston to see him after the finish of the greatest squadron cruise in motor boating history—the run of six Fairform Flyers from Jacksonville to New York. We were in the deckhouse of his own boat—flagship of the squadron—cruising across the bay to Provincetown. Incidentally, I might add that we were cruising at 23 *(Continued on page 146)*



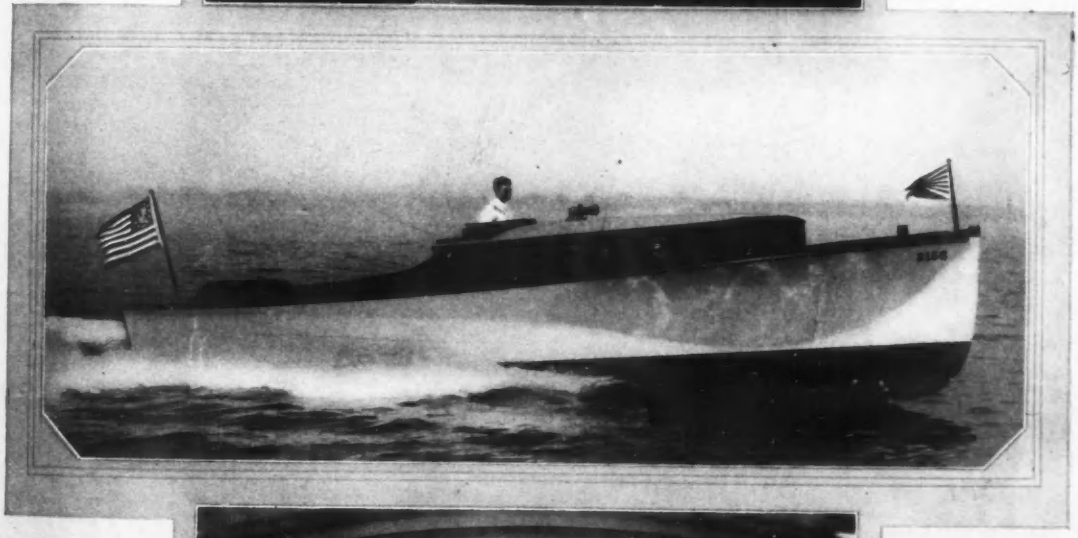
One of the fleet of Fairform Flyers driven by twin Kermaths of 200 h.p. each

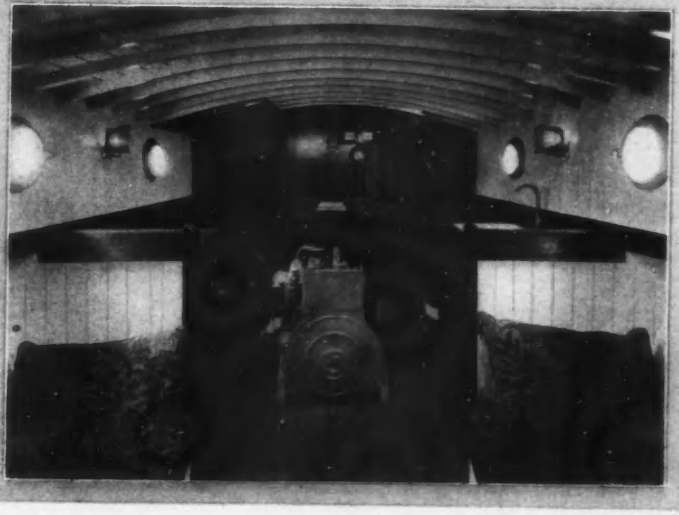
ROSIE'S NEW FOTO

Popular Marine Photographer Finds More Speed Necessary to Catch Elusive Picture Subjects

The new cruiser Foto has a comfortable cabin forward with accommodations for several men, although she was designed primarily for day work

Foto, 33 feet long, was designed for M. Rosenfeld by Frederick K. Ford particularly to facilitate photographic work afloat and was built at the Kanno Boat Works, City Island, New York





Photographs by M. Rosenfeld

A Kermath six-cylinder engine of 125 h.p. was selected for the power plant and has an abundance of power to drive the boat about 23 miles under favorable conditions

CRUISING THROUGH THE SEA LYON BOAT SHOPS

All material is shaped to size in the mill and delivered to the assembly floor. Here it is put together and the planking applied

After the sides are on the boat is turned over and the bottom planking applied. All screw fastenings are made with electric screw drivers

Seventeen boats are in process at one time on the assembly floor. After the planking is completed the hull is set right side up and decks, floor boards, etc., applied

When the hull has advanced sufficiently it is moved to the third floor where it is stained and finished with five coats of varnish

The machine shop in the meantime makes innumerable metal parts and machines the propellers, struts, hardware and stem pieces

Photographs by M. Rosenfeld

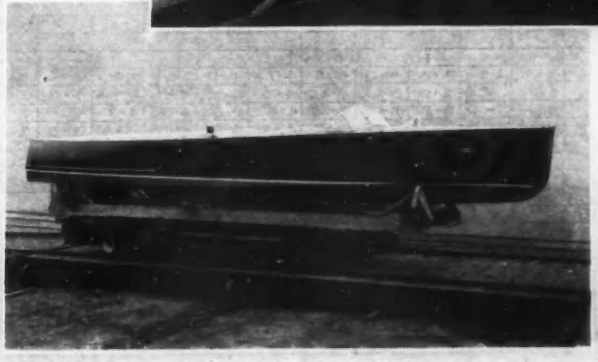
Original Manufacturing Processes Applied to Boat Construction in Lyon and Tuttle Plant at City Island Speed Work

In the upholstery shop, cushions, side curtains and similar canvas work is made over forms so that it will fit any of the boats interchangeably

A separate department for sheet metal work builds tanks, These are entirely of copper and built to fit the boat

A coppersmith finds plenty to do in shaping the copper exhaust pipes and manifolds. A watercooled exhaust is brazed to the tube at the engine end

In the installation department the hulls are completely finished by the addition of engines, rudders, upholstery, hardware, tanks, controls and smaller accessories



When finished the boat is carried to the launching slip on a self propelling car. It is then tested in the water to see that it performs correctly in all particulars

Photographs by M. Rosenfeld

BENBOW—A DEEP SEA AUXILIARY

An Able Design for Cruising on Deep Water Which Embodies the Combined Experience of Many Similar Craft

Designed especially for MoToR BoatinG

By WILLIAM ATKIN

Part I

SOMEWHAT over three years ago I prepared designs of a small cutter rigged auxiliary which I felt would be a superior sort of craft. This was a 28-footer having a beam of 9 feet 6 inches and a draft of 5 feet 3 inches. She, like this Benbow, was cutter rigged and we named her Fore An' Aft. Her owner is Edward N. Wigton of the Huntington Yacht Club and the little ship was built by one of the several builders located at Huntington, L. I.

I have sailed on her a lot and she is a good little vessel, comfortable, able, and not at all slow. The cutter rig is very satisfactory but like anything else in the world of boats one has to become thoroughly familiar with its five sails spread from a single mast, just as you have to become familiar with any other rig before it is possible to pass upon the subject one way or the other.

Now, the good ship designed for Mr. Wigton was a heavy displacement type; the reason for this being to get the maximum room on a water line length of 27 feet and a breadth that would permit a fair turn of speed. There is only one way in which to appreciate the room both on deck and below deck possessed by this craft and that is to go aboard her. The cabin headroom is nearly 6 feet; there is 3 feet foot room between the faces of the bunks in the main cabin; there is a Little Husky Palmer engine under the cockpit which does not extend farther forward than the aft end of the deck house; there is a galley of ample capacity with ice box, coal range, sink, dish lockers, etc.; there are two comfortable berths in the main cabin; and two berths forward under the deck. Also clothes lockers, and a water closet forward. You see, this is a lot of accommodations for a yacht which is only 28 feet 6 inches in over all length. And I thought at the time of designing her that she would be hard to improve.

A year or so after launching Fore An' Aft I had time to gather together a lot of data in connection with my own boats and those of other designers which I have been collecting with a view to getting the art of small yacht architecture down to a plane that would be something else than guess work and theory. It may not be amiss to mention that I have designed during the last 13 years some 227 yachts and very few of these have been at all similar. It is only during the last few years that I have been lucky enough to design and have built four boats of much the same character, these being Fore An' Aft, Magpie, Scorpio, and Sailho. All cutter rigged, all short ended with a capital S, and all built under my nose, so to speak, and all by the same builder. So I changed each in many ways to find out what happened. And I found out.

The fifth and the sixth of the same breed are now in the works; the former, however, will carry a yawl rig and the latter, another cutter, is Benbow, shown herewith. The latter is fully planked now and I am hoping for the best. Next summer I shall be writing these articles in her cabin.

All men seem to be most interested in cabin plans and I am sorry to say that most boats are built around a cabin plan which is the wrong way in which to go about the thing. The form of the hull and its sail plan are the all important things if speed is the first consideration. For cruising the cabin has much value, as well as the comfort of the craft when the weather is bad. So you see that it is not a simple problem to build a fast boat and at the same time have the accom-

(*Continued on page* 64)

TABLE OFFSETS 28'-8" AUXILIARY CUTTER BENBOW

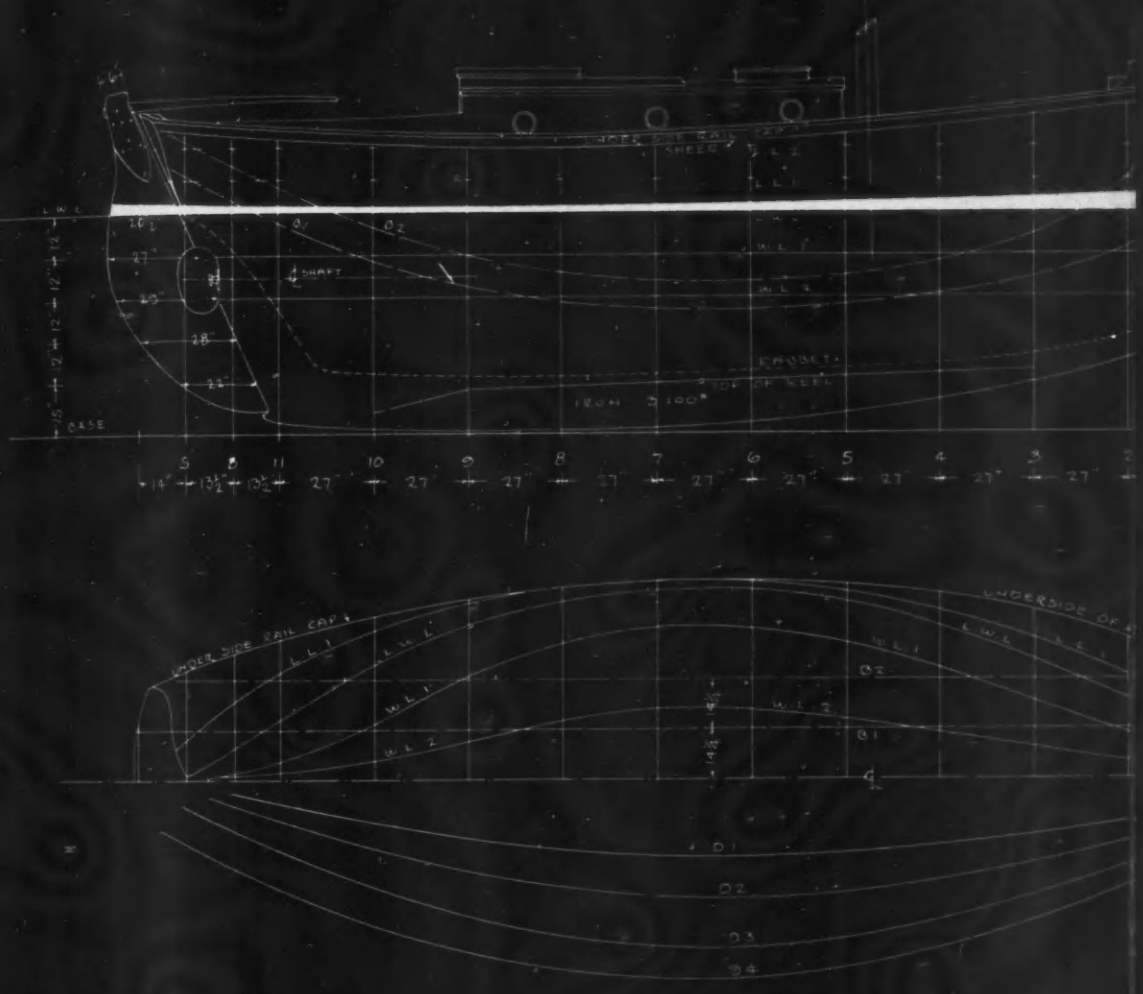
STATION	A	0	1	2	3	4	5	6	7	8	9	10	11	B	12	S
HEIGHTS																
L.W.L. TO UNDERSIDE CAP		3-4	3-0½	2-9	2-6	2-3½	1-13½	1-11	1-9½	1-9½	1-9½	1-10½	2-0	2-1	2-2	2-4
" " SHEER	3-1¾	3-1	2-9½	2-6	2-3	2-0⅛	1-10½	1-8	1-6¾	1-6½	1-6¾	1-7½	1-9	1-10	1-11	2-0
BASE TO B 2				6-0	4-3½	4-0½	3-8½	3-7	3-7¼	3-7¼	4-2½	4-11	5-10½	6-5	6-11½	
" " B 1			5-11	4-4½	3-8	3-3¼	3-0½	2-11	2-11¼	3-1¼	3-5⅜	4-1	5-0	5-6½	6-2	
" " RABBET			3-2¼	2-3½	1-8	1-7⅞	1-6½	1-5⅝	1-4⅞	1-4	1-4	1-5	2-11½	5-3		
" " TOP OF IRON					1-6		STRAIGHT				0-1½	0-6				
" " KEEL		5-3	2-8	1-8⅝	1-2	0-9	0-5½	0-3	0-1⅜	0-1	0-0⅜	0-1¼	0-3½			
L.W.L. " ℄ SHAFT										1-6	STRAIGHT			1-6		
HALF BREADTHS																
UNDER SIDE RAIL CAP	0-1	0-4¾	2-2½	3-4	4-0	4-5	4-7¾	4-9	4-6¾	4-7⅛	4-3¾	3-11	3-4	3-0	2-7½	
L. L. 2		0-0⅜	1-7⅛	2-9	3-7¾	4-2⅜	4-7	4-9½	4-9	4-7⅛	4-4	3-10⅜	3-1½	2-10	2-2	
L. L. 1		0-0⅛	1-4	2-5⅛	3-4	4-0¼	4-5⅜	4-8½	4-8¾	4-7	4-2½	3-7	2-6½	1-9⅜	0-11½	
L. W. L.		0-0½	0-11½	1-10½	2-9⅜	3-8	4-3	4-6¼	4-6¼	4-3	3-8	2-9	1-5	0-8½	0-1	
W.L. 1			0-5	1-1	1-10	2-7½	3-3	3-7½	3-7½	3-3	2-5½	1-4	0-6	0-1¼		
W.L. 2			0-1½	0-5	0-9	1-1	1-5	1-7⅜	1-8	1-4⅜	0-11	0-5½	0-2	0-1		
BOTTOM OF IRON KEEL			0-1	0-1½	0-2	0-2½	0-3	0-3	0-3	0-3	0-2⅜	0-2	0-1			
DIAGONALS																
D 1			0-7	0-0½	1-3½	1-6⅛	1-7¾	1-9	1-9¼	1-8	1-4⅝	1-0	0-7	0-4		
D 2			0-10⅜	1-6½	2-0	2-5	2-7⅞	2-9⅜	2-9	2-7	2-2⅜	1-8	1-0	0-7		
D 3			1-2	1-11⅜	2-8½	3-4	3-9⅜	4-0	4-0¼	3-0⅜	3-3½	2-7	1-9	1-2½	0-6⅞	0-7
D 4			1-6	2-5⅜	3-3⅜	3-11½	4-6⅞	4-9½	4-9⅜	4-6½	4-1¼	3-3½	2-7½	2-1½	1-5¾	1-4½

DIMENSIONS IN FEET AND INCHES TO OUTSIDE PLANKING PLANKING 1" THICK

Table of offsets for the 28-foot 8-inch auxiliary cutter Benbow

MoToR

A


UNDER SIDE RAIL CAP
SHEER
L.W.L.
L.L.
SHAFT
W.L.1
W.L.2
TOP OF KEEL
BASE
D1
D2
D3
D4

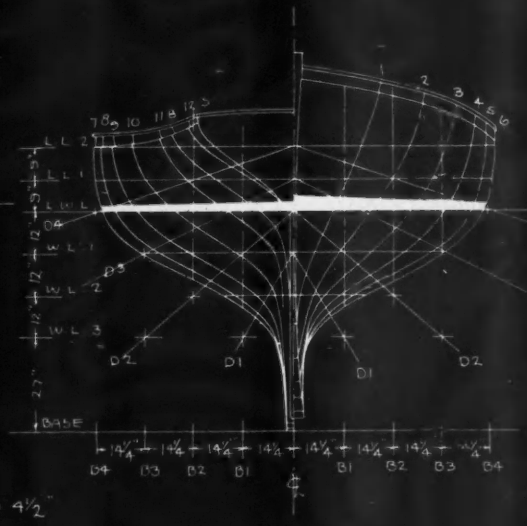
LOCKER
DISH LOCKER
TILLER
TRANSOM SEAT
ENGINE
DECK
LOCKER

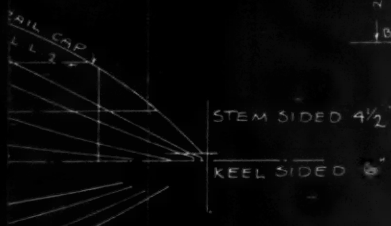
BOATING'S Build A Boat

28-Ft. 6 In. Auxiliary Cutter

"BENBOW"

SCALE:
¼ In. = 1 Foot





DESIGNED ESPECIALLY FOR

MOTOR BOATING

BY

WILLIAM ATKIN

SCALE:
n. = 1 Foot

at Series

RAMPANT—A NOVEL RUNABOUT

Clever Design for a Fast Boat Using a New and Original Gear Drive. Details and Features of Construction Fully Described

Designed especially for MOTOR BOATING

By WILLIAM ATKIN

Part II

PRESUMING that the lines of Rampant have been laid down to full size, a practice which should always be followed before beginning the construction of any boat, we can now proceed with the construction of this 22-foot, by 5-foot 2½-inch beam double ended runabout.

Build Rampant bottom side up. She will weigh but little before the deck and inside furnishings are added and the turning over will be easy lifting for four men. I have seen two men turn a rather heavy 30-footer right side up by simply hanging the boat in two rope strops or loops suspended from rafters above. The ropes take the weight and the hull is slid around in the loops; small chafing pieces are required, of course, to protect the corners of the keel and the edge of the deck or corner of the chines.

Forms in a boat of this type of construction will not be needed. The frames, which are set on 21-inch centers are the forms. From the laying down drawing you will find that the lines of Rampant are drawn to the outside of the planking; therefore the thickness of the planking must be taken from the frames, and this will mean that ⅝-inch must be taken from the bottom frames and 5-16 inch from the side frames, also remember that the thickness of the deck must be subtracted from the heights from the water line to the sheer. Many perfectly good designs have been botched by some builder who would not bother with little details of this kind. If I know anything about boats and boat builders let me state that it is the little things that make or mar a first class job. And most boats have something out of tune because the builder was intent upon producing a nice strong craft, and had little regard to the equally important items that spell handsomeness or rottenness, as the case may be.

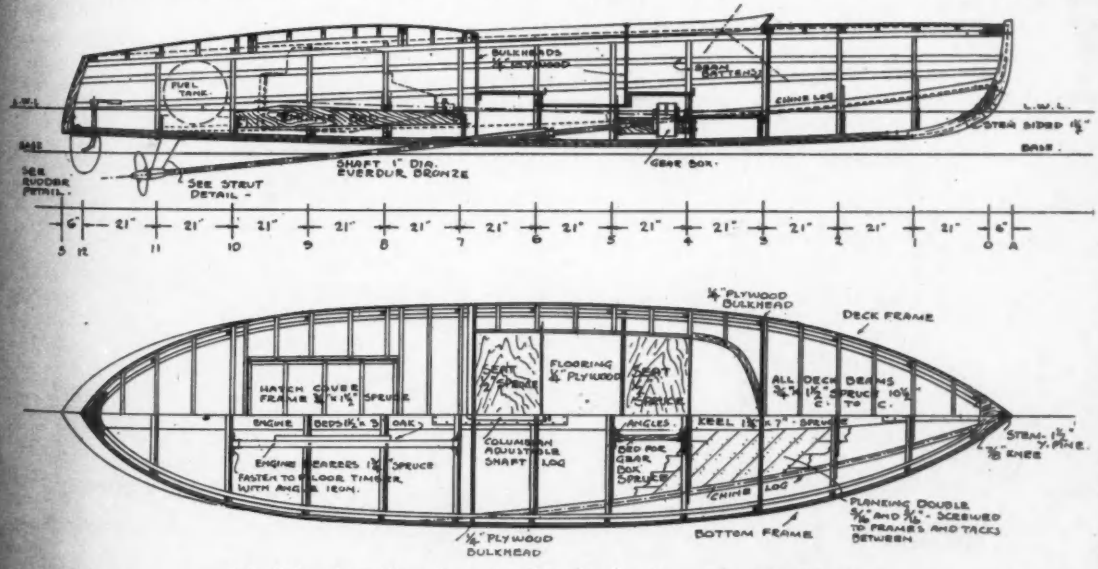
There are few short cuts in the building of a boat. This thing has to be done just so, and that; otherwise the thing is a mess, and no fooling.

The frames may as well be made first. These will be made from 1½-inch oak and when finished to shape will be moulded 1¾ inches. Since all the bottom sections are straight lines the frames will be straight and all alike; however, the sides are curved and every pair of frames above the water line will be different. Naturally the correct shape will be obtained from the full size drawing on the floor.

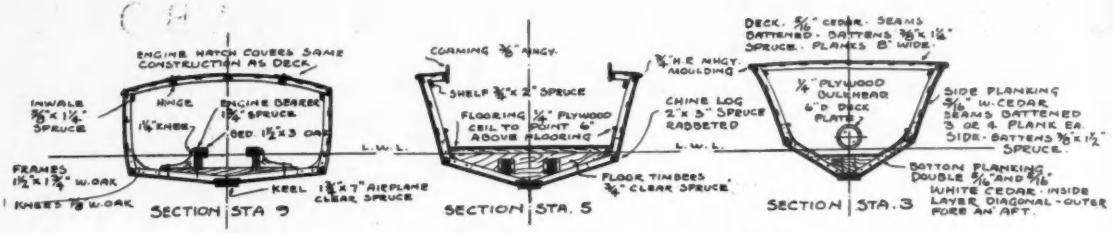
The heels of the frames are held together by ¾-inch thick floor timbers, the depths of these floor timbers depending upon the position of the frame. Note from the construction plan elevation the correct depths. The floor timbers are fastened to the forward face of every frame with the exception of Station 3. Use No. 10 brass screws for fastenings, 2 inches in length.

At the corner of the chine the bottom and side frames will be fastened with ⅞-inch white oak knees and fastened with No. 10 screws. The chine ends of the frames should be halved neatly before the knees are fastened in place permanently.

The sheer ends will be joined with a temporary cross member until the boat is turned right side up for finishing. This member should be ⅞ by 3-inch spruce, and screwed to the tops of the frames. If the work is carefully laid out the bevels for the planking,



The inboard profile and construction plan for the runabout Rampant


ENGINE HATCH COVERS SAME CONSTRUCTION AS DECK
INWALE 5/8" X 1 1/4" SPRUCE
HINGE
ENGINE BEARER 1 1/2" SPRUCE
1 1/2" KNEE
GED. 1 1/2" X 3 OAK
FRAMES 1 1/2" X 1 3/4" W. OAK
KNEES 7/8 W. OAK
KEEL 1 3/4" X 7" AIRPLANE CLEAR SPRUCE
SECTION STA 9
COAMING 3/8" ANGY.
SHELF 3/4" X 2" SPRUCE
FLOORING 1/4" PLYWOOD CEIL TO POINT 6" ABOVE FLOORING
L.W.L.
FLOOR TIMBERS 3/4" CLEAR SPRUCE
SECTION STA. 5
DECK 5/16" CEDAR - SEAMS BATTENED - BATTENS 3/8" X 1 1/2" SPRUCE - PLANKS 8" WIDE.
3/4" H.R. ANGY. MOULDING
CHINE LOG 2" X 5" SPRUCE RABBETED
1/4" PLYWOOD BULKHEAD 6" D DECK PLATE
SIDE PLANKING 5/16" W. CEDAR SEAMS BATTENED 3 OR 4 PLANK EA SIDE - BATTENS 3/8" X 1 1/2" SPRUCE.
BOTTOM PLANKING DOUBLE 5/16" AND 5/16" WHITE CEDAR - INSIDE LAYER DIAGONAL - OUTER FORE AN' AFT.
SECTION STA. 3

Sections through the hull at stations 3, 5 and 9 showing details of construction

and the notches for battens, chines, inwales, and keel can be cut before the frames are set up on the keel. While putting the frames together paint all surfaces that come together. Painting prevents warping and swelling and therefore makes a stronger structure. Jeffery's waterproof marine glue is better than paint for this purpose and if this material is obtainable use it in all joints.

The keel will be made from clear airplane spruce. This is a close grained, strong and light wood and is carried by most large lumber dealers. Its finished dimensions are as follows: length 21 feet 6 inches, thickness 1¾ inches, width 7 inches. The forward end tapers to the siding of the stem which is 1½-inch, but aft it carries out full width. A rabbet runs the entire length for the bottom planking. Now this must be made 1¼-inch deep and 1-inch wide, thus since the combined thickness of the two skins of planking on the bottom is ⅝-inch there will be ⅝ inches left, and this ⅝ inches will be the distance the keel projects below the planking. Leave the corners of this projection square. Not only does this projection serve as a track, but when the craft is under way the water flows diagonally from the center line, rather than straight aft. The ⅝-inch keel prevents the water from touching the planking for the entire length of the boat to a distance of nearly 4 inches along each garboard which means a saving in wetted surface of approximately 12 square feet. And wetted surface counts for a lot when speed is an object; that is why racing folks spend so much time polishing up the bottoms of their boats. See figure 3.

Another thing, the flat bottom keel makes an ideal surface upon which to fasten the strut, shaft log, and rudder. When the boat is hauled out of the water the flat keel is a convenience, too. I have noticed in the average runabout which is built with a knife edged triangular sectioned keel that all too soon the sharp edge is crushed and badly damaged from haulings out and groundings.

The stem will be made from three pieces of yellow pine, or if desired mahogany, as shown. The siding is 1¼-inch and at the stem head the moulded thickness will be 2¾-inch; at the water line the moulded dimension will be 4 inch, tapering to the thickness of the keel, 1¾-inch. Use ¼-inch brass bolts for fastening the several members of the stem together. The heads must be let into the cutwater and then be plugged.

The stern post will be made from yellow pine or mahogany and is sided 3 inches and moulded 2½ inches at the deck and 3 inches at the keel. It will be fastened to the keel with a light metal knee as indicated on the construction elevation.

With the keel and frames all finished the latter can be set up. The best way to go about this is to build a substantial backbone of ⅞-inch rough lumber, setting one piece of this on edge and the other flat, thus forming a large right angle shaped piece. At least six 2 by 4-inch pieces about 4 feet in length should be fastened at right angles to the flat member and at right angles to a snapped center line which must be scratched along the top side of the flat member. The purpose of this contraption is to form a straight and solid base upon which to build our boat. Upon the vertical member mark the spacing of the frames, in this case 21 inches center to center. And then set up additional pieces of 2 by 4-inch studding, placing these ¾-inch forward of each station center line. These studs must be spaced exactly on the scratched center line and should stand plumb and true. Now at some convenient height from the floor snap in a level line across the vertical studs and consider this the position of the water line. It will now be simple enough to measure the distance from the water line to the inside of the keel; these dimensions being taken from

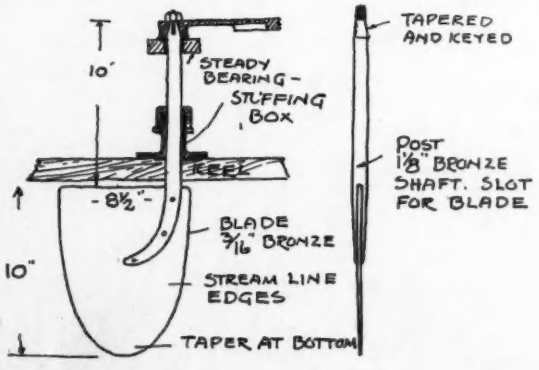


FIGURE 1

Details of the rudder and strut which should be made as shown

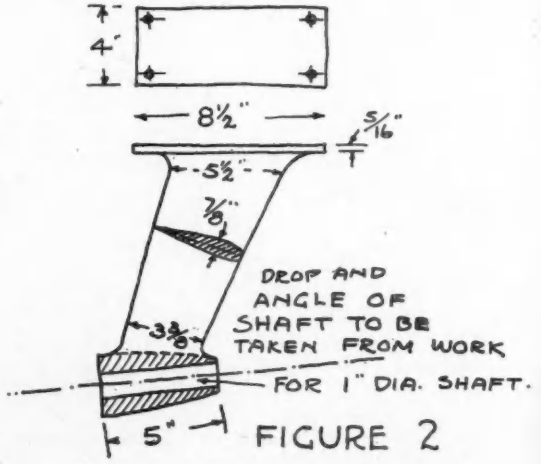


FIGURE 2

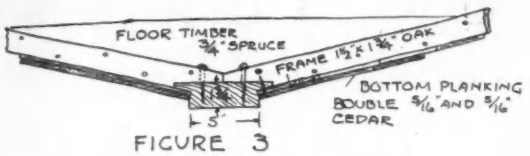


FIGURE 3

Detail of the frames, floor and keel

the laying down plan. Also note the angle at which the keel crosses the stations and saw off the ends of the vertical studs to these marks.

Now just spring the keel over the ends of the studs and this part of the job will be accurate and permanent. The stem and stern can be attached before or after the keel has been sprung in place.

Next the frames will be set in place, each one of these will be fastened for the time being to the upright to which it belongs, being careful that its center line and water line registers with the marks on the uprights. When all the frames are in place and lined up they will be fastened for good with two long brass screws extending through the keel and into the floor timbers.

The chine log will be made from 2 by 3 inch spruce, and rabbeted as shown in Figure 6. This should be in a single length. It will be fastened to the frames with two long screws let into the oak corner knees. And to the stern post and stem with similar screws. The chine log will have to be steamed before it will take the bend around the stern.

The planking on the bottom will be laid in two skins both these being 5-16-inch white cedar. The

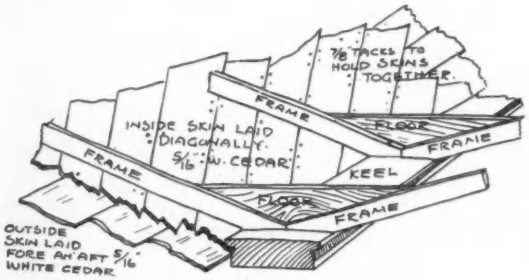


FIGURE 5

The inner skin is laid diagonally while the outer one runs fore and aft

inner skin will be laid diagonally running from the keel and leading aft. The planks should be about 5 inches in width and will be fastened with small galvanized iron brads until the outer skin is laid. The outer skin will run parallel to the keel in widths of about 5 inches; as each is applied it should be surfaced with Ferdico liquid glue and then fastened with brass screws. These being No. 8 about 1⅛-inch long. Since there will not be caulking or putty in the seams these must be nicely fitted.

Along each frame there will be a row of screws spaced one each side, and one in the middle of each plank. Then there will be ⅞-inch copper tacks through the two skins and clinched over inside. Place these tacks as shown in Figure 5.

The planking on the top sides will be single thickness and of 5-16-inch white cedar. Three planks each side will be enough. However, if difficulty is encountered in getting wide cedar use four planks each side. The seams of the side planking will be backed with ⅜ by 1½-inch spruce battens let into the frames as shown in Figure 4.

To turn back a bit. You will notice that at one frame, No. 3, there is a water tight bulkhead; this is made from ¼-inch plywood and, by the way, this plywood must be of a good grade and not the cheap variety used in house building. Haskelite is about the best. Now before the frames are set up the plywood

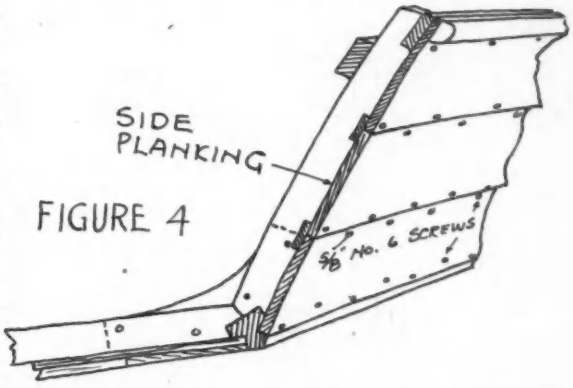


FIGURE 4

Planking on the side is single thick while the bottom is double thick

must be fastened as shown in the plans, using a row of screws all around the frame. Also it will be best before setting up to fit the plywood bulkhead just forward of frame No. 7, using a light spruce cleat all around its edge for attachment to the planking. The bulkhead above the forward seat can be fitted in after the boat has been turned right side up.

After smoothing up the planking, which will have to be done with files and sand paper, because of the many screw and tack heads, the boat should be painted with a thin coat of paint.

And now comes the time for turning Rampant right side up.

Put several saw bucks of ⅞ by 3-inch spruce across the hull below the bottom of the inwale and then remove the temporary cross beams. Now fit in the shelves which will be made from ¾ by 2-inch clear

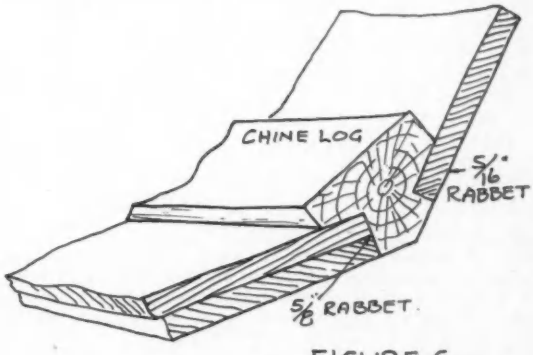


FIGURE 6

Detail of the chine log showing the different rabbet depths for the side and bottom planking

spruce, fastening these with brass screws into the oak frames.

With the shelves in, the deck beams can be made and fitted. These will be made from ¾ by 1½-inch spruce, as shown. Those over the engine space begin

(*Continued on page* 118)

SMALL MOTOR BOATS

Their Care, Construction and Equipment

A MONTHLY PRIZE CONTEST CONDUCTED BY MOTOR BOATMEN

Questions Submitted for the October Contest

1. Explain and illustrate the construction of a removable table that may be quickly set up in either the cabin or cockpit.
(Submitted by W. B. M., Newburgh, N. J.)

2. Describe and illustrate a water proof self contained first aid equipment which is most likely to be needed on a boat in case of sickness or injury.
(Submitted by E. F. C., Cambridge, Mass.)

TOOLS ARE NEEDED ON BOATS

The Skill of the Skipper in Effecting Repairs Will Determine How Extensive an Equipment Should Be Carried

Answers to the Following Question Published in the June Issue

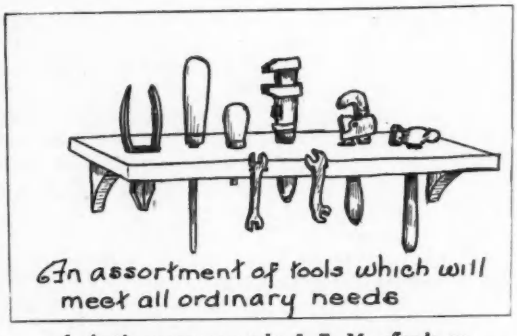
What are the necessary tools needed about a small cruiser, and give convenient methods of housing them.

MOTOR BOAT TOOL KIT

(The Prize-Winning Answer)

TOOLS are necessary on any motor boat whether you care to use them or not. There are times when a spark plug must be tightened or changed, or a loose screw tightened. Often a small breakdown can be repaired if tools are available, and there are many things that one can do around the boat. You should enjoy working around the boat, if at no other time, and to fully enjoy the work you must have good tools, in good condition. In an emergency you must work with any kind of tools that are available, and sometimes, if not immediately available they will be of little or no use. Tools stuck away in lockers or scattered among other things in a box or drawer somewhere aboard the boat will be neglected and covered with rust. When needed they will be hard to find and very likely unfit for use.

Buy good tools and keep them good by having a place for the tools and keeping them there at all times except when in use. There are several ways of taking care of tools on board a motor boat. Perhaps the simplest is a tool box, with or without a cover. Most any box will answer. The tool you want will always be in the bottom of the box and the whole outfit will have to be taken out to find one tool. A tool box with a cover and a tray for the tools that are most used is pretty good and will answer the purpose fairly well. The tool rack found in the engine room of some steam boats would be an incentive to keeping the tools in good condition and any tool desired could be instantly found. The tools are arrayed on a board cut out to receive them and are held in position by turn buttons. However, there is no place on the average small cruiser for such an array of tools. A canvas tool roll with pockets to receive each tool would appear to be the best method of caring for and keeping



A simple arrangement by J. E. M. affords accessible tools when needed

RULES FOR THE PRIZE CONTEST

READERS are urged to consider the above question for the October issue, and send answers to them to the Editor, MoToR BoatinG, 57th Street at Eighth Avenue, New York, N. Y. Answers should be (a) in our hands on or before August 25, (b) about 500 words long, (c) written on one side of the paper only, (d) accompanied by the senders' names and addresses.

The names will be withheld and initials used.

QUESTIONS for the next contest must reach us on or befor August 15. The editor reserves the right to make such changes and corrections in the accepted answers as he may deem necessary.

The prizes are: For each of the best answers to the questions above, any article or articles sold by an advertiser advertising in the current issue of MoToR BoatinG of which the advertised price does not exceed $25 or a credit of $25 on any article which sells for more than that amount. There are two prizes—one for each question—but a contestant need send in an answer to only one if he does not care to answer both.

For answers we print that do not win a prize we pay space rates.

For each of the questions selected for use in the following month's contest, any article or articles sold by an advertiser advertising in this issue of MoToR BoatinG of which the advertised prices does not exceed $5, or a credit of $5 on any article which sells for more than that amount.

All details connected with the ordering of the prizes selected by the winners must be handled by us. The winners should be particular to specify from which advertisers they desire to have their prizes ordered.

track of the tools on an open boat or small cruiser. When unrolled every tool is in plain sight, and when picking up, an empty pocket means a stray tool to be found.

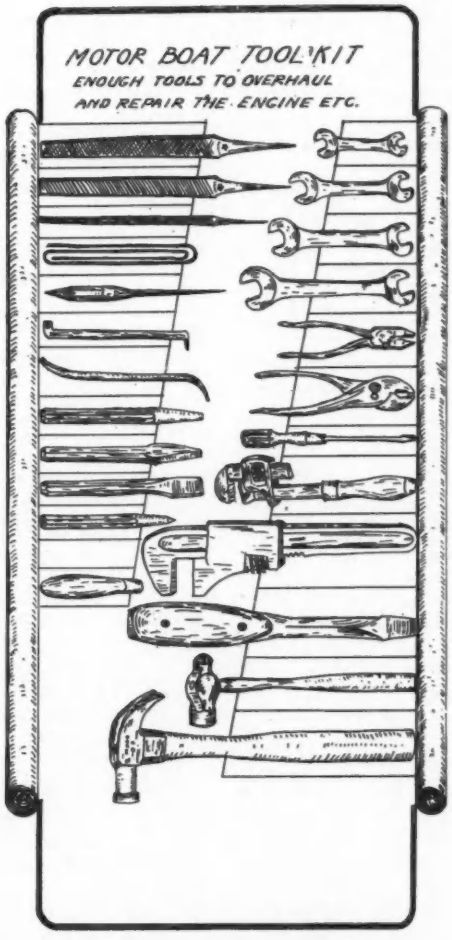
What tools are necessary for ordinary repairs and adjustments or an emergency? The following list would seem complete but may be added to or changed as desired.

No. 1½—16-oz. Nail Hammer (Claw Hammer), 10-oz. Machinist's Ball Pein Hammer, 10-in. Machinist's Heavy Screwdriver, 6-in. Screwdriver (Champion or Hurwood), 12-in Flat Monkey Wrench, 10-in Stillson Pipe Wrench, 8-in. Combination Pliers, 6-in. Side Cut Pliers, One each, Semi-finished 15 degree Double Head End Wrenches—No. 25 (fits ¼ & 5/16), No. 27 (fits 5/16 & ⅜), No. 31 (fits 7/16 & ½), No. 34 (fits ½ & ⅝), ½-in. Cold Chisel, ½-in. Cape Chisel, ½-in. Drift Pin, ⅜-in. Center Punch, ⅜-in. Cotter Pin Tool, 6-in. Offset Screwdriver, 7-in. Fine Flat File (Second Cut), 7-in. Coarse Flat or Half Round File (Bastard), 6-in. Round File (Bastard), File Handle, also for soldering copper, ½ lb. Soldering Copper, 2 ft. Acid-core Solder.

The nail hammer may seem out of place in this collection of engine tools but it will be found very useful on the boat; even more so than the pein hammer. Add to the list any extras that you may desire and such special tools as may be supplied with the engine, and arrange them all on a sheet of paper as shown or to best accommodate the various articles. Begin with the largest tools, and space them so that the tools do not touch and allow enough clearance to permit them to be rolled. When the arrangement is completed, mark around the outline of each tool. Remove them and lay out for the pockets by ruling a line at the base of the tools, and another diagonally across the sheet, allowing enough tool outside the pocket so that it may be easily removed. Lay off the spacing of the pockets by ruling between the tools and at right angles to the base line or edge. Lay out the flaps, which should be about 4 inches at the ends and half the width of the roll on the sides.

Transfer this size to a piece of waterproof brown canvas, cut out and bind the edges with imitation leather or any heavy binding material. The pockets are cut from the same kind of material with the open edges selvage or hemmed or bound and are sewed to the roll by stitching around the edges which are turned under, and along the dividing lines between the pockets. The lines may be transferred to the canvas or the paper sewed on with it and torn off later. A strap and buckle riveted or sewed to the end which will contain the largest tools will serve to keep the roll closed and the tools in place. Use two straps if you prefer.

This roll can be taken care of most any place, preferably near the engine. It would be a good idea to build a tool box a few inches larger than the roll and keep such spare parts as are carried, bolts, nuts and screws, etc.;—but no junk, in the box with the tools. Construct the tool box of not heavier than ½-inch lumber. Nail the sides together with finishing nails, putting the ends between the sides and the bottom inside with the top outside. Construct the whole box before cutting off the top. Then gauge a line just below the nails and saw off the cover on this line, plane the edges and put on the hinges. A lock may be added, but there is no good reason for locking up the tools on a motor boat. The key might be lost and delay occasioned by having to break open the tool box. Two flat brass hooks will keep the cover tightly closed. Paint or stain and finish the tool box as you wish and screw or cleat it to the floor near the engine if space is available. If moulded around with quarter round nailed to the floor the tool box will stay where it is put, still it can be easily removed and replaced.



W. B. M. prefers a canvas tool roll with a more complete assortment

Buying good tools, making a tool roll and box for the roll and spare parts is not enough. The tools and spare parts should be oiled occasionally by rubbing them with an oily cloth. This will keep the tools and spare parts in good condition but it is up to you to see that they are put back in the roll after use and the roll replaced in the tool box.

W. B. M.,
Newburgh, N. Y.

THE TOOLS TO CARRY

TOOLS aboard a boat should be easy of access, regardless of the assortment. A tool shelf, such as illustrated, has much to commend it. It is accessible, since it can be placed on a bulkhead or a partition near the motor.

Each tool is in plain view and all will be kept in the best possible position, since tools kept in closed lockers, usually in or near the bilge, thrown in more or less haphazard, are apt to become rusty from the dampness which characterizes most lockers.

The modern motor is so reliable that the tools illustrated will take care of all ordinary ills which befall a motor. The special wrenches which accompany most motors will find a convenient place upon the front edge of the shelf. Two nails will suffice to hold each wrench in position.

(*Continued on page* 94)

REPAIRS TO OUTBOARD PLANKS

Thin Bottoms on Fast Boats Susceptible to Damage and Need for Temporary Patching Should Be Considered by Carrying Emergency Repair Material

Answers to the Following Question Published in the June Issue

Suggest methods for making emergency repairs to the planking of a thin planked outboard motor boat that has been badly broken.

QUICK REPAIRS TO PLANKING

(The Prize Winning Answer)

TO be fast a boat must be light, but strength should not be sacrificed in order to reduce weight. The planking used in some of the lightest outboard racers is pretty thin but the boat will stand up in use with a vibration free engine, if it does not strike some floating object while at speed. Quarter-inch planking is pretty thin and the average man can stamp his heel through such a hull, canvas and all without much trouble.

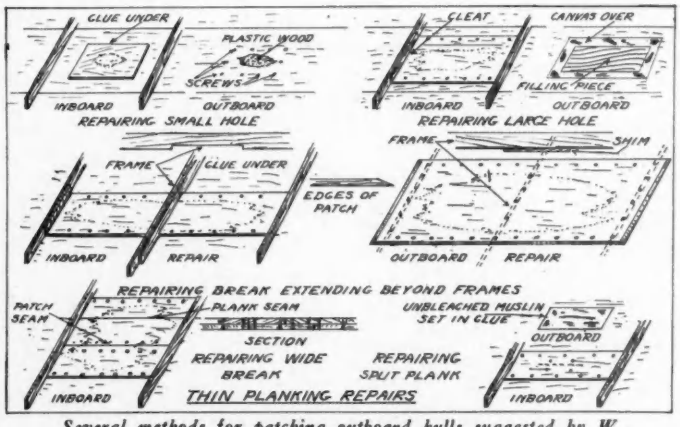
Way back in the good all school days we learned a formula something like this: M x V = momentum. If the formula is misquoted it does not alter the fact that the force of impact between a speeding outboarder and a floating object is equal to the weight of the boat and its contents times the speed, less a result obtained by computations based on the weight of the floating object and the resistance of water. No formula is needed to prove that when a thin planked boat strikes anything heavier than a small stick the planking is very apt to damage, and the extent of the damage will depend upon the speed of the boat and the weight of the drifting object. A dock builder calls a piece of waterlogged timber that will just float a sinker. It is truly a sinker for the outboard motor boat that strikes it, and it will require more than an old shirt to close the hole in the hull.

The procedure after striking any floating object heavy enough to damage the planking will vary. When the damage is well aft less water may come in if speed is maintained. In some cases, it may be possible to push a small flat piece of canvas through the hole and let the pressure of the water hold the canvas tightly against the hull, thus excluding quite some water. Perhaps, by slowing immediately and shifting as much as possible of the movable load to the end opposite the damaged planking the hole may be raised above the water. At least don't let her sink without a marker. Have a long piece of quarter-inch line made fast to the boat and to an empty gallon can or anything that will float.

After getting the boat ashore, determine the extent of the damage and decide on a repair. One is possible in nearly all cases. A canvased hull may not leak to any extent if the damage is slight and the canvas is not broken. The repair is simple. Stick on an emergency patch of canvas or unbleached muslin with a Stop-Leak-Stick or marine glue. The stick alone will temporarily repair some leaks. Mending tissue ironed down under a canvas patch will hold well. When the opportunity offers, back up the damaged portion of the planking with ¼-inch wood set in marine glue and screwed from the inside. Before the emergency patch loosens put on a permanent patch with marine glue, shellac the patch and paint. Follow the same method with all wood construction, sticking the patch directly on the wood. A light batten screwed over a split plank is a practical repair. The same procedure holds throughout in repairing the planking of either canvased or varnished hulls.

A small hole may be repaired by placing backing inside and after removing the splintered portion of the planking, filling the hole with plastic wood laid on in thin layers so that it will dry more rapidly. When set, plane off and sandpaper. This will make a waterproof emergency repair but it would seem preferable to glue an unbleached muslin patch over the repaired portion.

Wrapping a piece of board with several thicknesses of cloth and sitting on the board will make a very temporary repair in some cases. Use your shirt around the oil can or your shoes. Wrap your foot and press it over the hole. A good sized hole which does not extend beyond the frames on either side can be temporarily repaired by screwing on from the inside, a patch of ¼-inch wood set in marine glue. Parallel the grain of the planking so that the patch will bend to conform to the shape of the hull. Shape cleats to fasten to the frame and hold the patch in position. Set the patch in marine glue, screw on the cleats and then screw the patch to the planking along its edges. A canvas gasket under the patch will tend to make a close patch more watertight. For a more finished repair, cut out the damaged portion of the planking and set in a piece same thickness as the planking and put a canvas patch set in marine glue over the wood.

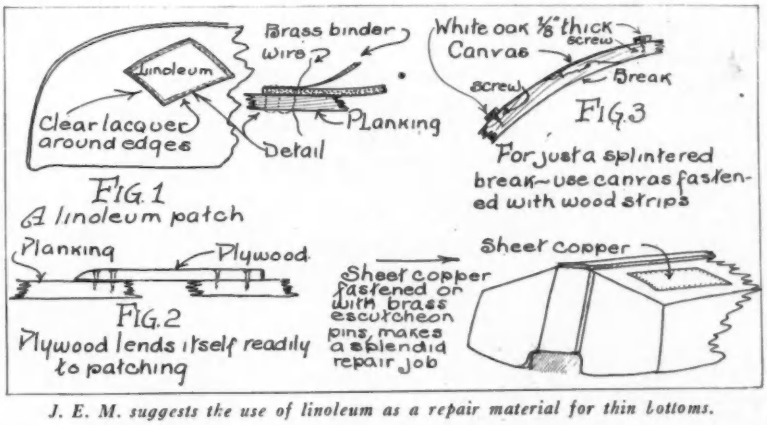


Several methods for patching outboard hulls suggested by W. B. M. both in and outside of hull

Where there is something to brace against a temporary patch may be held tightly against the planking with shores.

Where the break extends beyond a frame it may be necessary to also repair the frame. Cut away enough of the frame so that the ¼-inch backing piece will pass under and put in a patch long enough to extend over the space be-

tween two frames and fasten the patch with cleats and screws as explained. Notch the piece to repair the frame so that it will fit over the patch and screw in place. Fill in the planking and glue an unbleached muslin patch on the outside. For a temporary repair, this method may be employed with any sized hole. For a wide break, two pieces may be butted with a batten over the seam or by breaking seams with the planking and filling pieces, and using marine glue and screws a tight job will result. The same method will be good for a long break where several frames are damaged along with the planking. If the frames are not damaged it is not advisable to cut them away to allow the patch to pass under. Put a patch betwen each frame and a long filling piece of planking against them and fill seams with marine glue. A canvas patch glued over the filling piece will make a practically permanent repair. Often the filling piece is not necessary to keep out the water but the unevenness at the break will cause the boat to drag on that side.



J. E. M. suggests the use of linoleum as a repair material for thin bottoms.

In temporarily repairing a large hole in the planking, a patch of thin wood may be fastened over the outside of the planking. Extend the patch far enough each side of the break to get good fastening and run it fore and aft sufficiently to fasten to a frame past the damage. Allow about an inch past the frames, bevel the patch from a ½-inch back to almost nothing. Bevel both ends and the sides, which will allow the patch to slip through the water with less resistance. Fasten the patch to all frames after shimming the frames flush with the planking. Upson board absorbs water and softens very slowly and if covered well on all sides with marine glue will finish the day as well as wood.

A few hints on the use of marine glue may be interesting. One pound of marine glue will stick on about 3 sq. ft. of 8 oz. canvas or 4 sq. ft. of unbleached muslin. Only the soft grades of marine glue should be used for applying canvas to various surfaces. Heat the marine glue in any seamless pan over a slow fire and do not allow it to boil. While the glue is heating, clean and dry the surface to be repaired and prepare the patch. Apply a heavy coat of hot marine glue either to the surface or to the patch or both and if the patch is canvas, iron on with a not too hot flat iron. Begin ironing at the center and work towards the edges. When properly ironed the canvas will be firmly cemented to the surface and the glue will strike through the patch. For joints and laps in wood, use waterproof liquid marine glue between the pieces. Results are best when marine glue is applied to clean dry surfaces. In an emergency repair it may not be advisable to wait for the wood to dry thoroughly, but do the best you can. The Stop-A-Leak stick may be melted with matches, candle, or a hot iron, and quickly worked into the joints with a hot screwdriver or knife.

In an emergency the materials can seldom be selected. White lead or thick paint will answer nicely for setting the patch and the result will be as tight as with marine glue. Roofing cement, shellac, varnish, chewing gum, soap grease will be better than nothing to help keep out the water. It may be necessary to tear up a floor board or find an old box on the beach to get thin wood. Outboarders, as a general thing, don't carry many tools and it will, very likely, be necessary to cut with your knife and afterwards use it for a screwdriver and a hammer. Any screw will last in the water for a few days and you may have to take a small box apart to get nails with which to fasten the patch. No one can tell how to repair a broken plank with practically nothing to use for a patch or tools, but it can be done. If the effort is made something that will temporarily answer the purpose can be found. The accident may happen on Sunday when none but candy and cigar stores are open but either can supply the materials for a patch. Buy a lot of chewing gum and let everybody help chew out the sugar. Beg a box or two that will supply the thin wood and the nails to fasten the patch; and perhaps you can beg, borrow or steal something with which to work. Even a heavy cardboard sign is better than a hole and you will be able to bail out the water faster than it comes in. In the absence of enough screws or nails, punch small holes through the planking and the patch and lace it on with wire or string. Don't give up until you have tried, not once but many times. If the boat can be gotten ashore some sort of a temporary repair is possible. It is a poor sort of a man that won't help out a fellow with a boat when he is in trouble.

W. B. M., Newburgh, N. Y.

SEWED ON PATCHES ARE GOOD

INLAID linoleum of the best grade lends itself readily to the emergency patching of light hulls. If laid in marine glue, sewed on with copper wire, using the ordinary brass linoleum binder strip as a protection against the wire cutting into the linoleum, a satisfactory temporary job can be done.

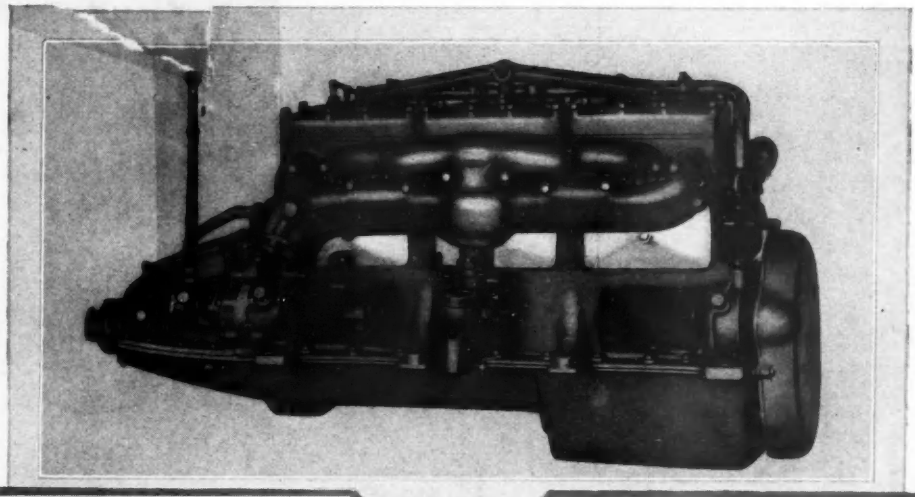
The final touch should be several generous applications of clear lacquer around the edges after the sewing has been completed. Lacquer will dry in fifteen minutes and is water resisting to a great degree.

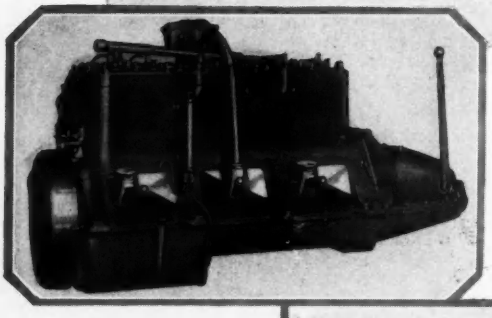
When the curved surface is not so pronounced as the situation covered in Fig. 1, the plywood patch illustrated in Fig. 2 makes it possible to cover successfully an out-and-out hole in the planking.

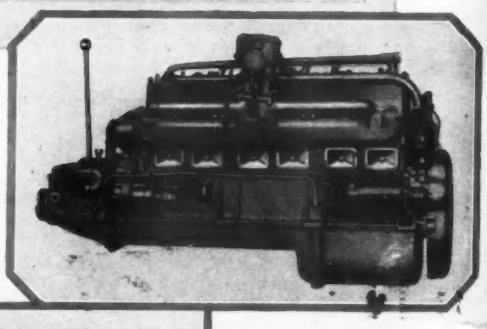
The plywood can be fastened to the planking with small, brass screws. As in the case of the linoleum patch, marine glue or hot pitch should be used generously over inside and outside surfaces of the patch to prevent warping (*Continued on page* 90)

THE CHOICE IN SCRIPPS ENGINES

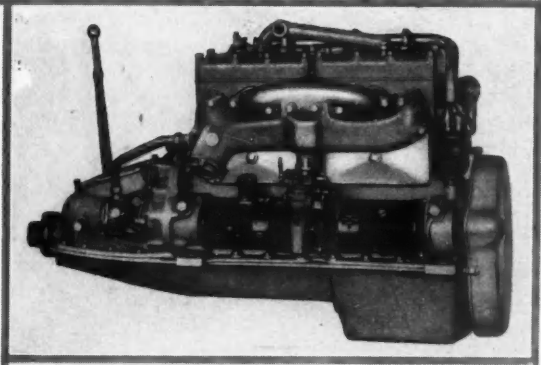
Performance of Power Plants Depends on Style of Hull. Careful Selection Necessary for Best Results



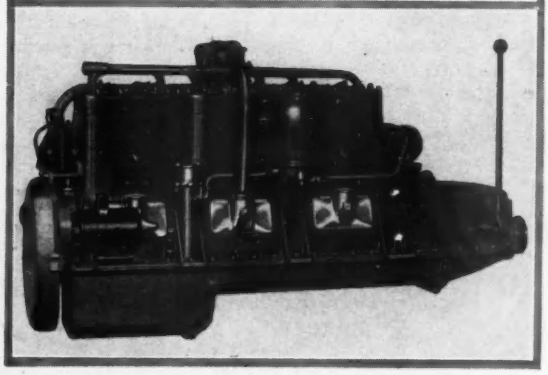




The Standard F6 Scripps engine, a suitable engine for continuous service in trim family craft up to 40 feet. Smooth power with a minimum of attention afford a new sense of motor enjoyment



Model F4 Scripps engine in two styles, MD and HS, differ in revolution and power. MD develops 25-40 h. p. at 1,000 and 1,600 revolutions, while the faster HS is good for 60 h. p. at speeds up to 2,400 r. p. m.



The new down draft carbureter models. Port side of the model 124 International which will develop 135 h. p. at 3,000 r. p. m., and the starboard side of model 160, a slower speed engine of 100 h. p. at 1,800 revolutions. Easy starting and flexibility are important characteristics of these machines

Port side of the model 202, the most powerful of the series, develops up to 200 h. p. and is particularly suited to such fast runabouts as Baby Gar, Chriscraft, Dart, Dodge and Sea Lyon. In these it produces maximum speed

Congratulations to the North German Lloyd! The launching of their twin Atlantic greyhounds brings America ever nearer to The Continent.

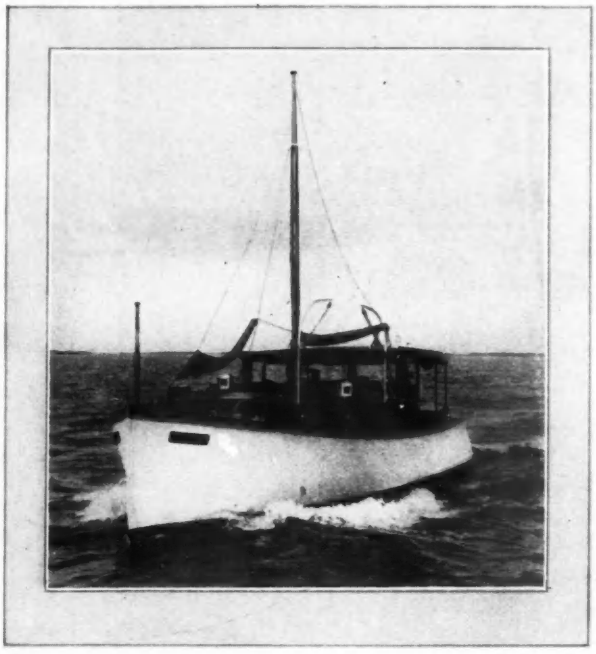
Our flattered ego points with justified pride to the fact that the Bremen and Europa, swift sea couriers of the New Germany, have slipped down the ways—Valsparred! Our satisfaction at being so recognized is heightened greatly, because Valspar was chosen only after the North German Lloyd had conducted an extensive research—after numerous finishes were subjected to the severest of tests.

They wanted the best. They found it in VALSPAR.

Valspar—aboard the Bremen and the Europa! What other claim could point more conclusively to the superiority of Valspar finishes? Actual tests, whether made by a highly-skilled marine engineer, as in the case of these twin liners, or the owner of a fleet outboard, prove Valspar a hale and hearty sailor—every time. Wind, rain, snow, sun, grease, oil, and wear hold no terrors for a Valspar finish. And Valspar's seven-seas service "stands-by" to attest it!

VALENTINE AND COMPANY, NEW YORK, N. Y.

VALENTINE'S
VALSPAR
FINISHES
WATERPROOF — WEARPROOF — WEATHERPROOF



This latest model single-cabin Matthews 38 was recently delivered to Mr. Deckert, of Saint Michael, Md. Her power is a 65 h.p. Kermath

YARD AND SHOP

Notes of Interest to Both Owner and Manufacturer

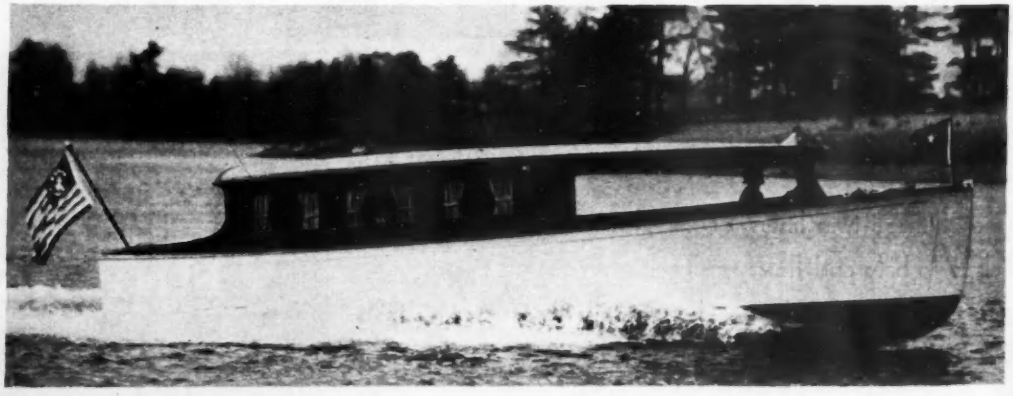
NO REFUND ON GAS TAX IN PENNSYLVANIA

IN an endeavor to secure legislation which will permit of securing a refund on money spent for gasoline which will be used in motor boats or for any other purpose other than in motor vehicles, Elisha Webb, of Philadelphia, has attempted to have a clause put in the Pennsylvania State law for the benefit of motor boat owners. So far the attempt has not been particularly successful and Pennsylvania boat owners who use any considerable quantity of gasoline find that it pays them to go to Jersey or Delaware or other nearby states to the south to buy their gasoline, where they get the benefit of a refund.

Their efforts will be renewed at the next session of the legislature and they hope to be able to find some way to relieve boats and other agencies using gasoline other than motor vehicles of the payment of something which is primarily a road tax.

TO TRY FOR NEW ORLEANS-ST. LOUIS RECORD

Reports received from the New Orleans dealer of the Sterling Engine Company indicate a great amount of activity in that section at this time. The Higgins Industries are the dealers and A. J. Higgins states that they are now completing a 57-foot cruiser which it is proposed to race against a cruiser owned by Dr. Leroy.



The Newport, built in Biddeford, Maine, by the Staples Johnson Company, is a 34-foot stock cruising runabout. A 200-h.p. Kermath motor provides a speed of 26 m.p.h.

Seven hundred of the smartest yachts afloat sail with Ovington's sea-going china and Ovington's nautical crystal

AND your craft should be added to this honorable roster! Whether she's a snug little dory or a sea-going palace—she is yours, all yours—and deserves the best, the very best.

Ill-assorted terra-firma china is as much out of place at sea as boots and

spurs—while this nautical china that Ovington's sells—takes to life afloat like a whale's progeny or a fledgling gull.

It was born to be a sailor and to carry sea-going vittles. Every piece of it can have your flags tattooed in a nautical way—in rich colors on the outside band. Every last plate—every cup—every saucer will have your flag and your club's linked in friendly tether. So then, away with landsman dishes and glasses—set a straight course down to Ovington's and command a set made specially for your ship. For as little as $63 you may have a sea-going china service for 6 people. For even less you may have a splendid crystal service.

OVINGTON'S

"Gifts from all over the World"

437 FIFTH AVENUE

NEW YORK, N. Y.

This run will be made very shortly and the object of the race is to beat the time made by the Robert E. Lee, which established a record in 1870 in a race with the Natchez. That race created considerable national interest and the record has stood to this day.

The Lee left New Orleans at four o'clock of June 30, 1870, and landed at St. Louis at 11:25 a.m. on July 4, 6 hours and 36 minutes ahead of the Natchez. It will be interesting to see how successful the modern cruiser will be in bettering this long-standing record.

RACE COMMITTEE USES BABY GAR

The Gar Wood organization has been rendering a very valuable service to committees in charge of races in various parts of the country by offering them the use of some of the Baby Gar runabouts. Beach and Goltra, Inc., Gar Wood distributors for the State of Connecticut, recently performed this service by loaning a boat for the Gibson Island race, and the courtesy was very much appreciated by the officials. The committee on the Bear Mountain race and also the race around Manhattan Island, was also favored in this way and they found that the fast runabout did much to lighten their task.

General J. Leslie Kincaid's new Chris-Craft Whoopee, which he is using at the Thousand Islands this summer

ABSORBING ENGINE VIBRATION

In a recent experiment by the International Nickel Company, manufacturers of monel metal, it was discovered that this material has the unique property of being able to absorb vibration when used in place of the conventional wood for engine beds.

The occasion for experimenting with monel for this purpose came with the problem of installing a 200-pound motor in a stock Old Town canoe. Originally there was no intention to solve the problem of dampening the vibration; rather the idea was to distribute it so that the frail hull would suffer no ill effects from it. After installing the long monel metal stringers, however, it was noticed that the amount of vibration transmitted to the hull was practically negligible, and at the same time there was very little ringing to this bed.

POWERFUL NEW MARINE MOTOR

The Christie Machine Works of San Francisco has developed an interesting new motor which incorporates in its construction many of the modern refinements of better engineering practice. The Christie is a four-cylinder, four-cycle machine of 3¾-inch bore and 4-inch stroke. With a piston displacement of 176 cubic inches, it develops a maximum of 25 brake horsepower. The new motor is especially well suited to use in fast runabouts and small cruisers and has performed very successfully in installations in government craft in various parts of the United States.

THE TEN-DAY ANCHOR LIGHT

Recognizing the need for a white kerosene light which will burn for long periods without refilling, to serve as an anchor light on boats which are not equipped with electric lighting, the National Marine Lamp Company is now offering a new ten-day light which requires very little attention. On many small boats the owners leave their craft in an anchorage where there is considerable traffic and frequently they are unable to be aboard except on week-ends. In cases of this kind it is very desirable to leave a light burning at all times and it is to fill this long-felt need that the new anchor light has been developed.

NORTHWESTERN DISTRIBUTOR FOR UTE

S. V. B. Miller, 63 Columbia Street, Seattle, Washington, prominent outboard motor distributor, has been appointed distributor for Ute, water-proof and wind-proof suits for the motor boating, yachting and outboard field, for the territory of the entire State of Washington, Northern Idaho and Alaska. Ute has proved itself to be an exceedingly practical garment for all kinds of motor boating and outdoor service and has been enthusiastically endorsed by a great many prominent outboard drivers and yachtsmen throughout the country.

Jack Parker, popular radio tenor, aboard his new 40-foot Fleetwing cruiser, with Mrs. Borick and Mrs. Parker

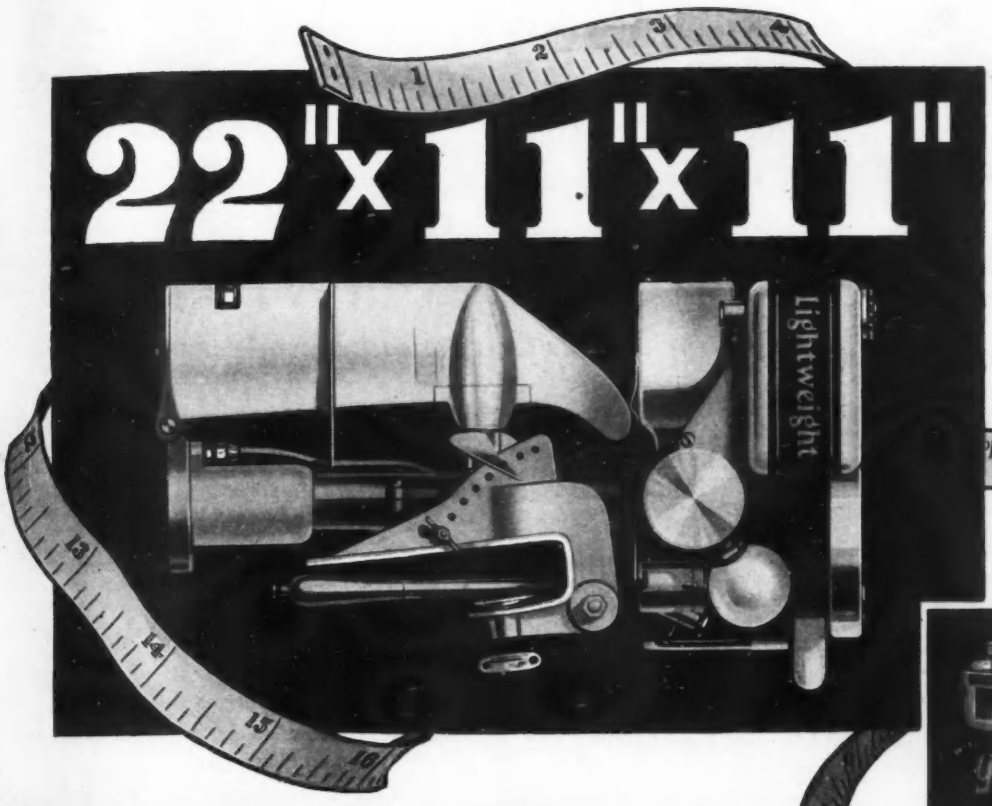
NEW ENGLAND KERMATH DISTRIBUTOR

J. B. Farr, President of the Kermath Manufacturing Company of Detroit, announces the appointment of the Walter H. Moreton Corporation, 1043 Commonwealth Avenue, Boston, as Boston distributors for the complete line of Kermath Marine Engines.

A.P.B.A. MEMBERSHIPS

Four new yacht clubs in various parts of the United States have just been welcomed into member-

(*Continued on page 74*)



The Super Elto Lightweight measures only 22"x11" x11" when folded. It is the smallest, most compact of all outboard motors.

Fits Into Your Vacation

Folds like a Jackknife

The Lightweight actually folds — there's nothing to "take down" or reassemble! The stout hinging mechanism (patent applied for) permits the lower housing to swing through a complete semi-circle, snapping securely under the muffler. It is instantly swung back to driving position—ready for service!

NO question about what motor to choose when you're trying to make a quick getaway for vacationland. The Super Elto Lightweight "fits in"—exactly! So small in its folded dimensions that you'll never miss the space it takes—*so light* that even those who travel light do not begrudge the moderate weight.

In use the Lightweight is a husky full-sized power plant, capable of driving any average boat at faster speed than you'd expect from even a heavier motor.

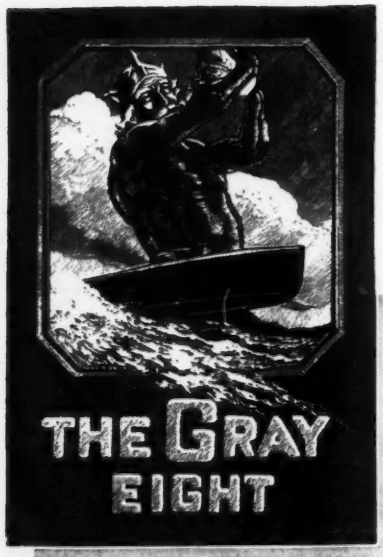
The Lightweight is reliable in all weathers. Starts instantly, easily. Weighs 38 pounds. Develops 3 horsepower. Quiet. Price $150.00. Send for catalog giving complete information on the Lightweight and other Super Elto models — the popular middleweight Speedster and the famous 4-cylinder Quad.

ELTO DIVISION, *Outboard Motors Corporation*
MASON STREET, DEPT. F — OLE EVINRUDE, *President* — MILWAUKEE

The Super Elto Lightweight

A-5445

Gray Owners Sell Gray Motors -



Get the Facts on Gray

Why does Gray stand preeminent in the marine field?

Why is it outselling any other line of marine motors in the world in 1929?

Why are stock boat builders flocking to Gray?

Why has the Marine World gone Gray?

Ask Any Gray Owner!

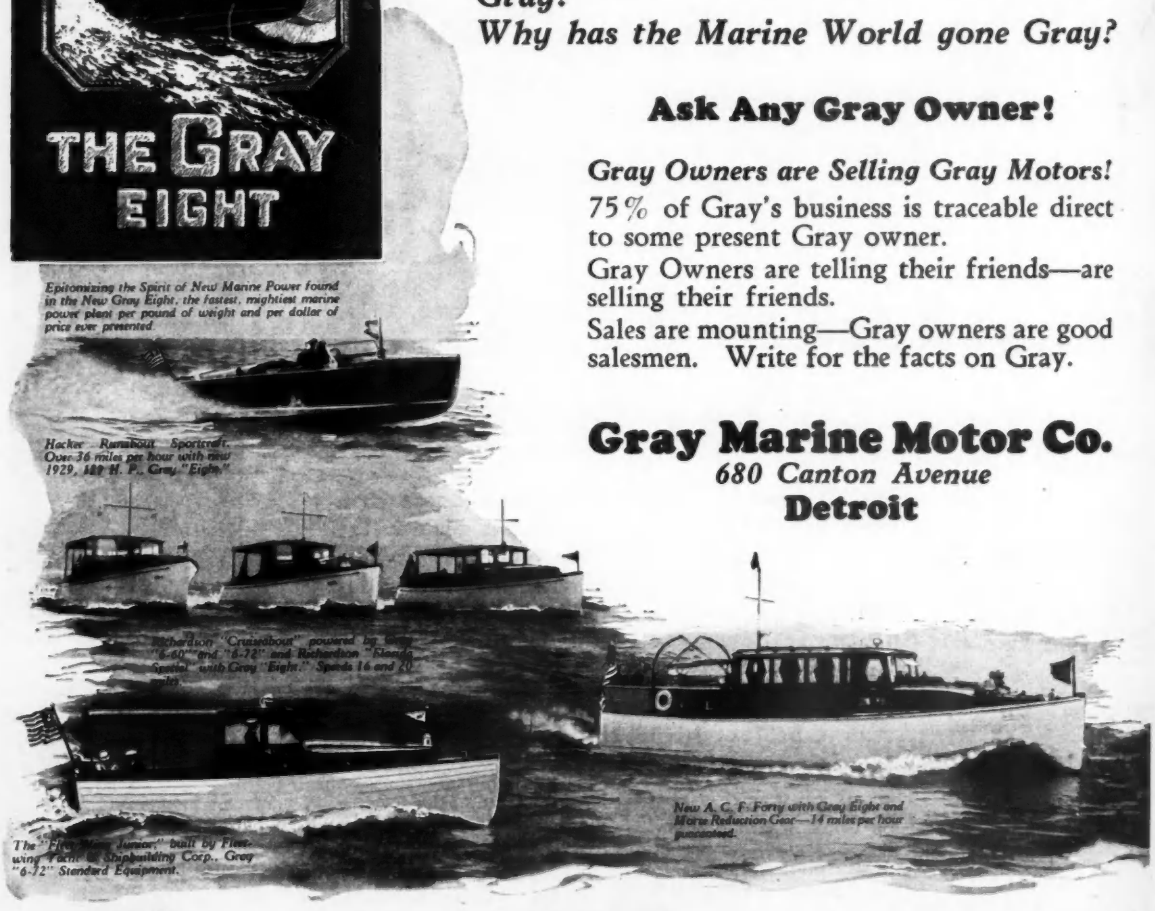
Gray Owners are Selling Gray Motors!

75% of Gray's business is traceable direct to some present Gray owner.

Gray Owners are telling their friends—are selling their friends.

Sales are mounting—Gray owners are good salesmen. Write for the facts on Gray.

Gray Marine Motor Co.
680 Canton Avenue
Detroit


Epitomizing the Spirit of New Marine Power found in the New Gray Eight, the fastest, mightiest marine power plant per pound of weight and per dollar of price ever presented.
Hacker Runabout Sportcraft. Over 36 miles per hour with new 1929, 122 H. P., Gray "Eight."
Richardson "Cruzerbout" powered by two "6-60" and "6-72" and Richardson "Cruzer" equipped with Gray "Eight." Speeds 16 and 20 miles.
The "Flying Yacht Tender" built by Pinewing Yacht & Shipbuilding Corp., Gray "6-72" Standard Equipment.
New A. C. F. Forty with Gray Eight and Morse Reduction Gear—34 miles per hour guaranteed.

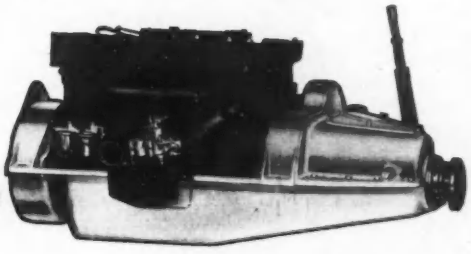
GRAY MOTORS

Built by Pioneers—Engineers—Leaders.

Advertising index will be found on 3rd last page

Richardson Cruisabouts step out with new power

GRAY "Six-Sixty"



More *speed* to get there and back—more *power* to buck the wind and waves are now yours in Richardson Cruisabouts. *Gray Six-Sixty puts it there.*

Power—speed—brilliant performance—the qualities a man wants in the boat he buys do not get there by chance. 27 years of marine motor development have made the Great Gray Line what it is today. 27 years of engineering development have resulted in this great Gray Six-Sixty—the motor that is pronounced the *perfect marine six* by boaters all over the world.

Gray makes a motor for every boat (from 5 to 200 H. P.), Fours, Sixes, an Eight, a Single and a Double. And you may ask any Gray owner for his frank opinion of Gray dependability, and honest value. Gray users sell Gray Motors.

REASONS WHY

Big Crankshaft.
Big Bearings.
Long Pistons.
Lowest center of gravity.
Full Pressure Lubrication.
Handy Oil Filler.
Submerged Pressure Oil Pump.
Built-in Strainer.
Seven Bearing Crankshaft.
Built-in Gasoline Pump.
3⅜" Bore.
4" Stroke.
Length Over-all, 50⅛".
Develops 61 H. P. at 2900 R. P. M.
Shortest, lightest, lowest (above center of shaft), sturdiest six in its power class.
Weight (Iron) 660 lbs.
Weight (Aluminum) 570 lbs.
Price (Iron) $645.
Price (Aluminum) $665.
Flame-arrester and self-draining drip-pan are included.

Gray Marine Motor Company
680 Canton Avenue
DETROIT

GRAY MOTORS

Built by Pioneers—Engineers—Leaders.

BENBOW—A DEEP SEA AUXILIARY

(*Continued from page* 48)

modations of a Leviathan. In Benbow I have sacrificed headroom so as to reduce freeboard and cabin height and in all my cruising days aboard her must be content with 5 feet 6 inches standing room, but since I am a little less in stature than this I shall not mind, although some of my guests may.

The cabin trunk has been kept narrow so as to give plenty of deck room which is needful and desirous, but then again this will make the cabin seem smaller than it really is. On deck then we have a cockpit which is 3 feet in length and a trifle under 4 feet wide, but only 9 inches deep. There is, however, nice seating room between the after hatch, (see deck plan) and the cockpit, and then as I dearly love to lie flat on the floor I shall be very comfortable and snug with the cockpit coaming coming to a height of about 16 inches above the cockpit floor.

A short bridge deck, more in the nature of a panting beam, across the boat at a very vital spot not only strengthens the boat but brings the sill of the companionway door well above any water which may be shipped. The bridge deck is just 1 foot in length.

The cabin house is 9 feet long and only 4 feet in width, its sides raising to a height of 15 inches above the deck and carrying but 2-inch crown. The companion slide is off center so as to give room overhead when the boom is amidships in the boom frame. Also a hatch is fitted on the center line forward, this coming over the galley and supplying ventilation to the very heart of a cruising boat.

Fixed dead lights are let into the sides of the deck house, three to each side; forward there are two port lights, with a third in the aft end of the house on the port side. The hatch in the forward deck gives access to the quarters forward.

Now see how well ventilated the cabin will be; you can pull out air, scoop in air, or leave all four of the hatches off to admit sunlight, and, which will sooner or later happen, rain!

The bulwark rail at variance to the rest of my short end cutter family will be low, only three inches and will be fitted with a light cap and no top timbers. And, unlike all the rest, Benbow will have canvas covered decks; not because the caulked decks leak, but because the canvas covered deck is so much easier to keep up. Also, the canvas covered deck is cheaper which, with me, is a consideration of more than passing moment.

Like on the cutter Fore An' Aft the bowsprit is set to the starboard side of the stem head and will be fitted with suitable tackle to enable its being reefed or taken inboard entirely. Not only is this a ship-shape notion, but it has several advantages as well, both while the craft is afloat or up for the winter months.

I bought some time ago from Simpson, Lawrence & Co. in Glasgow some yacht fittings, among these being a clam windlass and the galvanized iron pin rails shown on the deck plan. These items do not seem to be made in this country at all. The clam windlass is a very simple device for breaking out an anchor, quite small and powerful and just the thing for a little boat.

The mast in Benbow is stepped well abaft the stem. The purpose of this is to permit spreading a large fore staysail, a sail which can be used in extreme bad weather and for this reason this piece of canvas must be especially well made and of excellent material. The first 28-foot cutter carried a housing topmast and while this has proved quite satisfactory I feel that a single stick is in some ways more desirable. One trouble with the separate topmast is the fact that it must have separate backstays and these, of course, complicate matters in tacking. In the present design the backstay leads from a point close to the attachment of the block for the jib halyard.

The mainsail carries 351 square feet and should be made from 8 oz. Wamsutta duck or material of equal quality; the staysail spreads 99 square feet and the jib 112 square feet. Both of these sails should be made from 8 oz. duck. All the sails are cross cut. The jib is fitted with a Wykeham Martin jib furler, a device which permits the sail to be rolled about its own stay by simply easing off the sheets and drawing in on a light line which winds up the drum shown at the tack of the jib. There is a swivel at the head attached to the wire halyard which permits the luff rope to revolve freely. The top sail carries 53 square feet and should be made from 4 oz. duck. I should use a bamboo pole scraped and varnished for the topsail sprit. Fit a sheave in the head of the mast for the sprit halyard and a cheek block on the gaff for the topsail sheet. With the topsail set Benbow carries 614 square feet of sail. You will notice I have left off the jib topsail.

The spars should all be made from spruce and both the boom and the gaff should be hollow. Details of the standing and running rigging are clearly shown and dimensioned on the plans. The club on the staysail should be made from a bamboo pole.

The lines show a light displacement craft of low freeboard and a long lateral plane, the forefoot is deep and will not fall off; the depth of forefoot allows a lot of headroom up under the forward deck as well. Most small craft are far too shoal forward and in the least chop have a bad habit of falling off when on the wind. The sections are much flatter than in any of the previous boats of this type that I have done before and while this cuts down headroom and floor space it is valuable from the standpoint of gaining stability and speed. Benbow carries 3,100 pounds of iron outside and 2,800 pounds inside. With water, anchors, chain, fuel, motor, etc., she will set well. Now, remember, that in a small craft it is important to have the ballast distributed so that while at anchor and with no one aboard the boat will set down by head, because the crew in a sailing craft always are aft and several hundred pounds have considerable effect upon trim.

The cabin: beginning aft we have the engine under the cockpit and separated from the cabin by two swing doors. There is a small clothes locker each side of the cabin aft under the bridge deck which will come in handy for hanging shore clothes, etc. Then we have the two berths having water tanks under each, their capacity being approximately 40 gallons. There is good room between the faces of the bunks, 32 inches. Now do not build the bunks too high because one must have headroom for sitting up under the decks. Behind the bunks are lockers for bed clothes; these should be built right up to the underside of the deck and be fitted with doors with flush hinges and openers.

I have put the galley amidships this time, setting the stove athwartships with the sink and wash tray running along the side of the boat. There is a lot of

(*Continued on page* 116)

When You Call Down a Blessing

on STAUNCH HARDWARE

The new W-C "Sea-more" Portlight Figure 5253

WHEN a sudden squall finds you far from home and the rain comes down in sheets, when you can't see two feet ahead and perhaps have to anchor and ride out the storm—then you call down a blessing on staunch hardware.

For this happens to all yachtsmen some time or other. You might as well have the best and be prepared for the worst. And when we say the best, we mean nothing less than Wilcox-Crittenden Fittings—Marine Hardware that has been known for its dependability over 80 years—in days when it was a common occurrence to risk life and limb on W-C staunchness.

You will find a beauty of line and distinctiveness of appearance in W-C Fittings that will enhance the looks of any modern craft. It will pay you to look over the new numbers in the line—fittings of advanced design that will add comfort and safety to your boat. We will be pleased to send you the new specialty booklet. Or, if you prefer to view them first-hand, visit your nearest marine dealer—he will be glad to show them to you.

WILCOX, CRITTENDEN & CO., Inc.

4 So. Main Street

MIDDLETOWN · · · · CONNECTICUT

WHAT THE NOVICE SHOULD KNOW

(*Continued from page* 38)

bar and do the repacking at low water, if for any reason it should be undesirable or impossible to haul out on a marine railway.

Once in a while the reverse gear may give trouble by slipping. Simple and easily accessible adjustments are generally provided for both forward and reverse speeds and the adjustment should be made so that the clutch engages easily and takes hold immediately in either direction.

One of the most common causes of engine trouble is a very simple one which can easily be avoided—dirt and water in the gasoline. The usual practice of taking on gasoline is generally a matter of having it pumped directly into the tanks or poured in from cans, with no provision made for straining. The amount of dirt and water which is generally taken from a small quantity of gas by straining thrugh a chamois skin is often surprising and when this is allowed to accumulate in the bottom of the tank, a deposit is formed which is the potential cause of a great deal of trouble. The water is heavier than the gas and settles with the dirt to the lowest part of the tank. In smooth water it does no particular harm, as the outlet of the tank should be arranged somewhat above the bottom, but in rough water, the contents of the tank are tossed about with the result that some of the sediment finds its way into the feed lines. A strainer in the line should be provided, of course, to catch this, and should be cleaned occasionally before there is too much of an accumulation. Even when the precaution is taken to strain the gas carefully through chamois skin, a certain amount of water will be certain to get in, due to the condensation of mist and vapor which is drawn in on wet, foggy days.

Two speed boat kings of the Pacific Coast, Dick Loynes and Ralph Snoddy

Copper tubing makes the best feed line for gasoline with ground unions and soldered joints for connections. The tube may be bent to run in any desired direction and comes and goes with the vibration of the engine instead of breaking. A valve should be provided both at the engine and at the tank, and both should be closed when the engine is not running, simply as a matter of precaution against leakage, either in the fuel line or from flooding of the carbureter due to a stuck float. All connections should be kept gas tight as well at all times. When flow is by gravity, the carbureter should be as far below the bottom of the tank as possible, in order to insure good pressure, regardless of the trim of the boat. Electrical and mechanical fuel pumps are coming into almost universal use, on account of the desirability of utilizing space under cockpit floors, etc., as a location for tanks.

While we are on the subject of gasoline, there are two points which ought to be kept in mind that will make for an extra factor of safety and which may sometimes actually prevent a serious mishap. Always check up on your supply of gas just before making a run, especially a long one in open water, and allow yourself more than just barely enough to make the proposed distance. Many things can happen on the water in a short time—you may have a storm blow up unexpectedly, necessitating your running for a different point than that originally planned; you might have hard winds and head tides to buck which you didn't figure on, or you might have to go to someone's assistance and tow him to a harbor—any of which might double your gas consumption. So be prepared and know every time you leave the mooring that you have more than enough gas—and oil—to meet any emergency.

The other point has to do with the care which should be exercised in using open flames about a boat. We are inclined to smile when we hear of the caution against using a lighted match to see if there is any gas in the tank or to look for a gas leak, as the danger is obvious, and yet such occurrences are not infrequent. By all means use an electric light or flash light and not a match, candle or lantern anywhere about the boat, and never take an open flame into a cabin that has been closed up even for a short time, on account of the gas fumes which almost inevitably collect. This danger can be minimized by stopping the engine by closing off the fuel when through with it, rather than by the usual switch. This consumes all gasoline in the carbureter, leaving it entirely dry.

The observance of the points which we have outlined so far should go a long way toward keeping the engine in condition to give good service for an entire season. However, no mechanical device is perfect and, even with the best of care, the motor may call for a little special attention, either to get it started or to keep it running. No matter how perfectly a motor may run, every boat's equipment ought to include a good set of tools, and the more complete it is, the better will be the chances of being able to effect any necessary adjustments or repairs, when you are out of the reach of shop facilities. A good set of tools for a small cruiser would include a hammer, monkey wrench, Stillson wrench, screw driver, pliers, set of open end wrenches, spark plug wrench, cold chisel, center punch, and any special tools that might be required for the engine in question. A crank or starting bar is useful if the starting motor fails, a marked stick for measuring gas even if a mechanical or electrical gauge is provided on the instrument board, and an oil can for lubricating small parts. In this connection a light machine oil is usually recommended instead of ordinary engine oil for magnetoes, distributors and other similar electrical parts. It is always well to have an extra can of cylinder oil aboard, especially on a long trip.

Spare parts should be carried to replace any small accessories that are likely to be damaged or get out of order. A few spare spark plugs are almost certain to be needed, and extra fuses, generator brushes and springs may prove useful at some time. Gaskets and valves might also be included for extended cruising, in case repairs should have to be made at some out-of-the-way point where engine parts would be difficult to get.

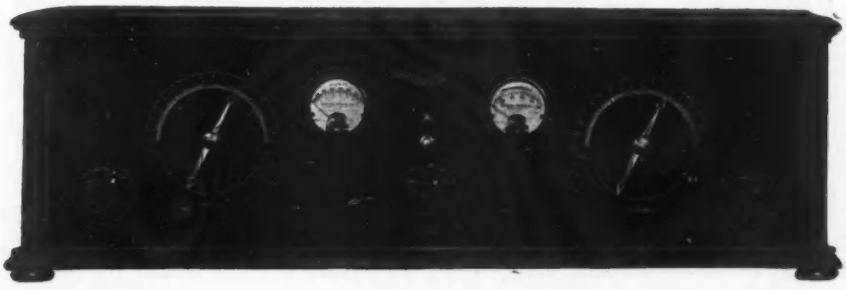
Equipped with these tools and parts, the average person can generally get a balky motor to run by going over it in a logical way, even if his mechanical experience is limited. Make it a point to observe all the various adjustments on the engine when it is running right so that they can be corrected if disturbed. Try to get an instruction book of operation and care for your particular make of engine, as this will be worth a good deal more than a lot of general information.

In starting the engine, get into the habit of retarding the spark to prevent a kick-back caused by the explosion occurring before the pistons reach the top of their stroke. This becomes doubly important when starting by hand as the kick is often sufficient to break an arm. Open the gasoline valves, set the reverse gear level in neutral, open the throttle about one-third, pull out the choke and turn on the ignition switch. When the starter button is pressed, an electrical circuit is completed which allows current from the battery to turn the starting motor over, which in turn revolves the flywheel. As the engine turns over, the pistons draw into the cylinders a charge of gasoline which is very rich—that is—it contains a mixture of a large percentage of gasoline vapor and a small proportion of air, due to the fact that the choke, when pulled out, shuts off the supply of air to the carbureter and permits the raw gas, undiluted by air, to be drawn in. After a turn or two of the engine, this charge of gas, compressed in the cylinders by the upward stroke of the piston, is ignited and explodes, and the engine starts to run under its own power. As soon as these explosions are heard, the foot is taken from the starter button and the choke should be pushed in, all the way if possible. It may be necessary to leave it out a little for a few minutes, if the engine tends to die down when the choke is pushed all the way in. As the engine begins to run under its own power, the spark should be advanced as far as possible, unless a knock is heard, when it should be retarded just enough to clear the knock. At the same time, the throttle must be closed immediately to a point where the motor will turn over slowly without stalling. Guard against racing the engine at any time, especially when it is new or cold, and also against stepping on the starter when the motor is running. On engines not equipped with self-starters, the procedure is the same except that the flywheel is turned over either with a bar, crank, or by taking hold of the rim of the flywheel. In the latter case, remember that most engines turn counter-clockwise as you face the flywheel.

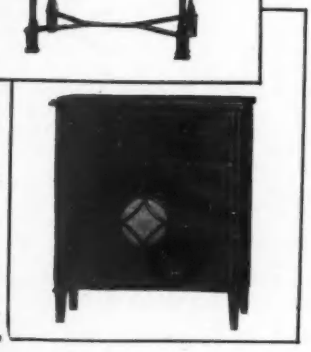
(*Continued on page* 68)

NEW ADMIRALITY SUPER-10

Screen Grid Model



The Highboy



The Console

HERE IS THE PERFECT BROADCAST RECEIVER

For Marine Installations and in the Home

The New Admiralty Super-10 is the very apex of Modern Research Engineering.

It is a brand new receiver for the radio connoisseur which we believe represents final superiority over any broadcast receiver now being manufactured or contemplated.

Strictly custom-built, this great new model meets the requirements of those that want the best. It is in fact, the Highest Class Receiver in the World.

SUPER FEATURES

Ten Radio Tubes—Long Range—Power and Selectivity — Entirely Self-contained — Electrically Operated—Perfect Reproduction with Great Volume — Material and Construction conform strictly to U. S. Navy Standards—Universal Wavelength Range for use in any part of the World—Exquisite Consoles Available — Unconditionally Warranted Against Defects.

Sold direct from the factory, and through selected dealers in the principal cities of the United States and foreign countries.

Atiractive Illustrated Literature on Request
Write, telegraph or cable today!

NORDEN-HAUCK, INC., ENGINEERS

MARINE BUILDING, DELAWARE AVENUE AND SOUTH STREET
PHILADELPHIA, PA., U. S. A.

Cable: NORHAUCK

WHAT THE NOVICE SHOULD KNOW

(Continued from page 66)

Now, perhaps, we have gone through all these preliminaries, and the motor should start, but it doesn't. What next? It may help the inexperienced mechanic, who is trying to diagnose his engine ailment, if he knows the general theory of his engine's operation. In the first place, there are four main functions to which each operation of the engine has some relation—carburetion, ignition, lubrication and cooling, and if these are understood, the trouble shooter is less likely to be disconnecting his water pipe when the spark plugs aren't firing or examining the battery when a bearing burns out.

The theory, in brief, is this: The gasoline in liquid form is converted into a spray and mixed with air in the carbureter, producing a combustible vapor which is drawn into the cylinders and compressed by the pistons. A spark is introduced into the charge at the spark plugs at the proper time, which ignites the gas, and the rapid expansion occasioned by the heat as they burn drives the piston downward and imparts a rotary motion to the crankshaft through connecting rods which connect the pistons to the shaft. The lubrication system, of course, is designed to provide a film of oil between all moving parts and thus prevent excessive wear, and the cooling system is intended to draw off surplus heat and keep the engine at an efficient running temperature.

The problem, then, when the engine refuses to start, or stops after it has been going is to determine which of the systems is at fault and then trace it through logically from the source until the trouble is located.

Commodore George Harrison Phelps and Arthur Bray of London, England, two officials at the coming Harmsworth Regatta at Detroit

In the carburetion system we start with the supply of liquid gasoline at the tank, which either flows down through a line of copper tubing or brass pipe by gravity, when the tank is higher than the carbureter, or, if not, it is supplied to the carbureter by mechanical means, which forces the gasoline up to it as the result of their construction and operation. Another method is the use of a fuel pump, operated either mechanically or electrically. In any case the gasoline is supplied to the carbureter at a slight pressure and passes through a small opening, the size of which is regulated by a needle valve. Opening the valve admits more gas and makes a richer mixture, while closing the valve reduces the flow of gas and makes it leaner. Passage through this small opening breaks the liquid up into small particles, which are mixed with air drawn through another opening. This forms a combustible vapor, which is drawn up into the cylinders by the suction created by the downward stroke of the pistons, and compressed on the upward stroke, the time of entering, as well as leaving, being regulated by valves which are mechanically operated by a camshaft driven from the main crankshaft.

At this point the ignition system takes up its work. Current is supplied in any one of several ways—by dry cells, storage battery or magneto. In each case, with the exception of the high tension magneto, low voltage current is developed (6 volts), which is stepped up to a very high voltage by passage through a coil. Where dry cells are used they have to be replaced from time to time, as there is no means of restoring the current drawn from them. The storage battery is generally used in conjunction with a generator driven from the engine which, as its name implies, generates current when the engine is run and stores it up in the battery. Both of these systems require the use of a device to send the current to the spark plugs at the proper time, known as a distributor. The high tension magneto is a device which combines in one unit the functions of generating current of high voltage and distributing it to the plugs at the right time. When this current reaches the plugs, it jumps across the gap and produces a spark which ignites the compressed gas.

Obviously, where the parts of the engine are bearing against each other and traveling at high speed the heat produced by the friction would be so great that they would soon be burned unless some method of lubrication were provided. This is generally accomplished by having a supply of oil in the base of the engine with a pump to supply the pressure to get it to all moving parts. All that the operator needs to do is to keep the oil at the proper level and see that it is changed regularly. Sometimes glass sight feeds are provided which show when the oil is being pumped and at other times gauges are supplied to register the pressure. In either case it is well to make a practice of seeing that the oil is pumping properly every time the engine is run. In the mechanical oiler, a supply of oil is contained in a reservoir from which drops are pumped out, to flow through copper tubes to the various cylinders and bearings.

Cooling is accomplished invariably in marine engines by water. No radiators are required, as a continuous supply of cool water is always available which is drawn in through pipes by a plunger or gear pump and circulated through water jackets around the cylinders and heads, and returned overboard. Generally the water piping is so arranged that a part of the water after leaving the engine can be introduced into the exhaust pipe. This serves to keep the piping cool and eliminates the sharp bark of the exhaust by cooling the gases before they reach the outside air.

After a person has run an engine for a few years, unless it is one of the kind that runs faultlessly throughout the entire season with never a minute's trouble, he has probably observed the various symptoms that accompany the more common engine ailments and will be able to tell by the sound of the engine what the trouble is when it does not run properly. When it stops entirely, the manner in which it stops is generally a very good clue to the cause, that is, whether it gradually runs down, or stops abruptly as if the switch were thrown, or if the stopping is accompanied by backfires, etc. Until he has obtained that experience, he must, as we mentioned before, endeavor to find which system is at fault and then trace it through from the source step by step.

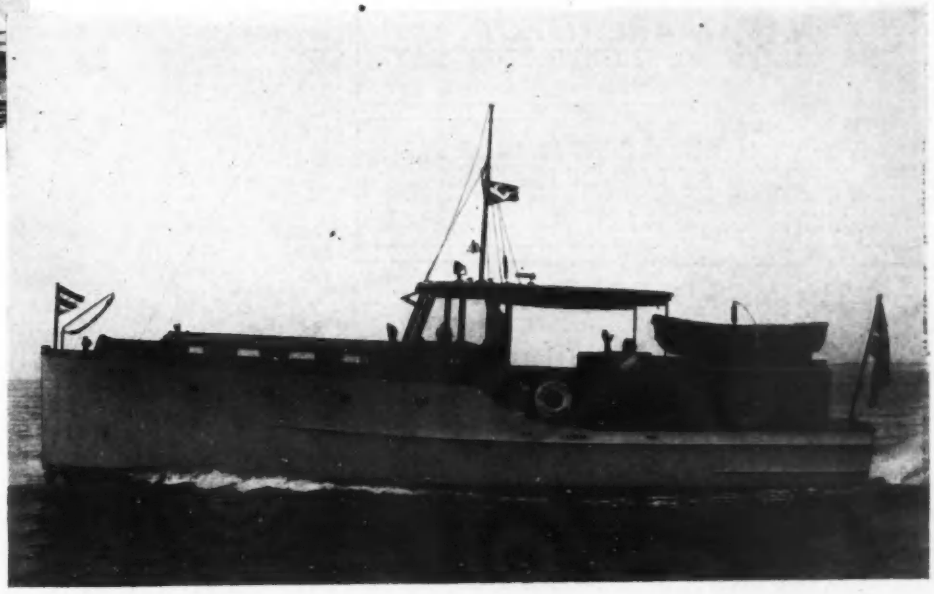
Improper feeding of the gasoline is a very common cause of trouble. However, if the precautions which we have already pointed out in regard to keeping out dirt and water are observed, most of the difficulties will be avoided. Modern carbureters are simply constructed and rarely need adjustment. Too frequently when an engine starts to misbehave the carbureter adjustments are immediately tampered with, when, as a matter of fact, the adjustment is perfectly all right and has run the engine properly for some time. Generally speaking, backfiring of the engine will be an indication that the mixture of gasoline in the cylinders is too lean (that is, contains too small a percentage of gasoline) and a rich mixture will be revealed by uneven running of the engine, slowing down, a lack of power and black smoke in the exhaust. This condition is observed when the choke has been left out too long. The engine responds sluggishly to the touch of the throttle and misses on one or more cylinders.

Regardless of the system of fuel supply, there should be a good flow of gas to the carbureter. In checking up on the flow of gas, first measure the supply in the tank, using a stick to sound it, if there is any possibility that the dash gauge (where there is one) is in error. If there is enough, make sure that the air vent, a pin hole generally found in the center of the tank cap, is open. If this becomes stopped up, a vacuum is created in the tank as the level drops, preventing a flow of gas. Then see that the line is not clogged so that the fuel is free to run and clean any strainers in the line. Loops in the gas pipe should be avoided, as cases have been known where air has accumulated in the tops of bends so that the flow was air-bound. If all valves in the line are open and the flow at the carbureter is weak, there must be an obstruction either in the pipe or in the tank at the mouth of the pipe. This can be temporarily overcome by blowing through the line, although it does not remove the cause of the difficulty, as the tank should be thoroughly cleaned out.

If the flow to the carbureter seems to be all right, unscrew the needle valve and run a thin wire through the hole to free any sediment that may have lodged there, and drain the carbureter. When the pipe is connected and the valves are open, the gas should flow into the carbureter and raise the float until the valve at the opposite end of the pivot arm from the float has been seated. The float, of course, must pivot freely, which it cannot do if the pivot arm is bent. If the float is of cork, it may after a number of years become soaked with gas and refuse

(Continued on page 70)

- - - they all say she rides well, because she's designed and built for any sea - - - - -



THE 40 PILOT

—The Popular Humphreys Fisherman-Cruiser

Those owners who already have put this graceful seaworthy 40-foot Pilot Cruiser to their everyday use, are enthusiastic over the stability and smoothness of her performance.

No wonder she "rides" well! Before any construction begins on a Pilot, or on any of the other types of cruisers in the Humphreys Diesel Squadron, the most expert of designing and engineering service is devoted to her planning. Finest of seasoned and tested materials are secured. Skilled workmen under rigid supervision then proceed to lay her framework; build her hull; finish and refine her throughout.

The 40 Pilot will stand up against any sea—she's built especially for fishing, and is available in three different arrangements suited to your cruising or fishing needs. If you want the safety and extended cruising advantages of a Diesel Engine, or if you prefer the gas type of power, either is yours—with the 40 Pilot.

But the increasing popularity of this compact, sturdy little cruiser is "eating up" our output—so get your order in early. Orders are being taken now for delivery during the Florida season.

We will arrange a visit for you to our yards at Keyport, New Jersey. Just telephone our New York Office.

Length Over All, 40'—Beam, 10'6"—Draft, 3'. Accommodations for 6, plus paid hand. Equipment complete.

Write for complete specifications and information on the Humphreys 40 Pilot, or for any other size of cruiser you have in mind.

FREDERIC P. HUMPHREYS INC.

230 Park Avenue — HUMPHREYS — **New York City**

Cable Address: HUMPFRED

NAVAL ARCHITECTS AND YACHT BROKERS

WILLIAM ATKIN
NAVAL ARCHITECT
THE MIZZEN TOP, HUNTINGTON, N. Y.
Send 25 cents for illustrated list of stock plans.

FLORIDA SERVICE
If you have a boat in Florida waters that you want sold, insured, surveyed, or cared for in any way; or if you wish to purchase one; I can serve you. Over fifteen years' experience as a Naval Architect, Shipbuilder and Inspector. My list of all classes of boats for sale and charter is very extensive.
HAROLD H. BAILEY, 206 Exchange Building, Miami, Florida

THOMAS D. BOWES, M. E.
NAVAL ARCHITECT AND ENGINEER
Offices:
Lafayette Bldg., Chestnut and Fifth Sts., PHILADELPHIA, PA.

COX & STEVENS, Inc.
Naval Architects and Engineers — Yacht Brokers
521 Fifth Avenue
(Corner of 44th Street) New York City
Telephone: Vanderbilt 8811

WALTER COOK KEENAN
NAVAL ARCHITECT
4239 St. Charles Avenue, New Orleans, Louisiana
Sail and power yachts. Houseboats and commercial vessels. Surveys made in all Gulf Ports.
I have a large number of yachts of every description for sale, and some for charter. Stability and free board calculations. Cable address: "Walkeen."

JOHN H. WELLS, INC.
NAVAL ARCHITECTS
BROKERAGE Service That's Different SUPERVISION
Telephone: Murray Hill 3128-7
11 EAST 44th STREET NEW YORK

MANY NEW YACHTS FROM CONSOLIDATED YARD

The Consolidated Shipbuilding Corporation, Morris Heights, largest and oldest designers and builders in the world of complete pleasure craft, have added many new yachts to the fleet this season with more to follow.

The first of the season was Adolph M. Dick's new 76-foot cruiser Vixen; then came Niord, J. T. McMillan's new 66-footer, followed by Philip H. Johnson's 66-foot Mohican; L. M. Wainwright's 106-foot twin Speedway Diesel powered Klahanee; two specially constructed fishing boats for use off Montauk, one owned by Caleb Bragg and the other by the Montauk Company; Goody, Leon Goodman's new 35-foot fishing cruiser; Alida, a new 75-foot express ferry for B. H. Borden; Curlew, a de luxe mahogany runabout for Horace Gallatin; Solana, a 106-foot twin Speedway Diesel powered cruiser for W. C. Robinson, and Baby Mouse, a 34-foot Playboat for T. M. Jones III.

LONE STAR ARRIVES

The new Diesel yacht, Lone Star, which has just been completed from a design by Cox & Stevens, Inc., for Mr. George G. Bourne, arrived this week from the builder's yard in Kiel after a most successful maiden voyage and will immediately go into commission. Lone Star is one of the largest Diesel yachts that has been completed this season, being 162 feet on the water line with a beam of 27 feet and a draft of 10 feet 6 inches, and is equipped with two solid injection Diesel engines, giving her speed in excess of 12 knots. She has unusually attractive and comfortable quarters. Lone Star proved herself an admirable sea boat on the voyage and unquestionably will attract a great deal of attention in these waters for the reason of her unusual design and attractive appearance.

What the Novice Should Know

(*Continued from page 68*)

to float properly. This would cause the carbureter to flood continually, and the float should be removed, thoroughly dried out, and given a coat of shellac. About the only other thing that could happen to the carbureter would be to have it pull waste or rags into the air intake, choking off the supply of air. If the engine has become flooded from an over-supply of gas, the only remedy is to turn the motor over until the surplus has been blown out. If the engine is equipped with a starter, retard the spark, open the throttle, be sure the choke is in, and let the starter turn the motor over until it starts.

In case of trouble with the ignition, as missing explosions would be likely to indicate, look first at the spark plugs. These can be tested while the engine is running by holding a screw driver or other metal connection so that it rests against the head of the engine and the top of the plug where the wire is attached. This shorts the plug out of the circuit, so that if there is no apparent difference in the running of the engine, the plug is likely to be at fault. A drop of water or a little carbon at the gap of the points will foul a plug and it should be cleaned well, all carbon scraped off, and the gap adjusted to the thickness of a worn dime. If the porcelain is cracked, the only remedy is a new plug. To test a plug that has been removed from the motor, lay it on the cylinder head with the wire attached and watch the spark at the gap as the motor is turned over. Be sure the spark is a good fat one, as a weak spark may be strong enough to jump the gap in the open air, but not good enough to jump across under the compression of the combustion chamber.

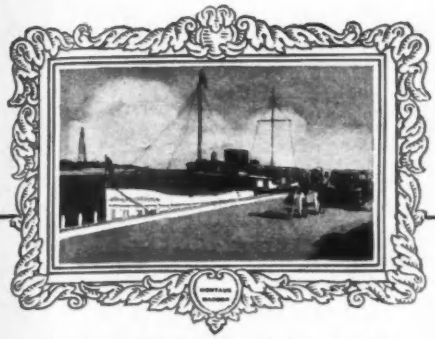
If the plugs appear to be all right, go over the wiring and look for breaks, loose connections, or spots where the insulation has been chafed off where the circuit could be grounded. Then examine the distributor or magneto. The breaker points should be clean and hit squarely and if they do not, they may be cleaned up with a fine file or sandpaper (not emery paper) and the distance between points when open adjusted according to a gauge generally found attached to the magneto wrench which fits the adjustment nut. Finally, look at the battery and test each cell with a hydrometer and see that the connections are clean and tight. Corrosion around the positive terminal of the battery accounts for a great deal of trouble, especially in starting.

Aside from carburetion and ignition troubles, sticking valves are sometimes responsible for missing explosions. Valve stems should be free to slide up and down in the guides. If the stem is not clean, an accumulation of grease and carbon will make it stick in the guide so that the valve is either kept from seating as quickly as it should, or else is prevented from seating at all. Valves should always have a certain amount of lash, that is, they should be so adjusted that there is a clearance between the stem and push rod or tappet, as otherwise, when the motor is hot, the expansion of the metal is likely to prevent the valve from seating with the result that the hot exhaust gases blow past the valve and burn the faces. The faces should always be clean and bright and should seat well all around or compression is lost. It is a good idea to have them ground during the spring overhauling by a man familiar with this work, as improper grinding will do more harm than good. The accumulation of carbon in the cylinders can also be removed at this time.

The cooling system rarely gives trouble except in very old engines in which the jackets are clogged with an accumulation of rust and scale which stops the flow of water and causes the engine to overheat. An occasional flushing of the water jackets is always desirable as it loosens and removes the sediment which otherwise accumulates in the bottom of the jackets and forms a hard mass that would eventually be almost impossible to remove. The flushing is readily accomplished by stopping all outlets to the jackets except one at top and bottom. A hose from a faucet can then be attached to the upper opening and the full pressure of the water allowed to flow through the jackets, washing the sediment out at the bottom. If this is done periodically, the life of the cooling system will be materially prolonged.

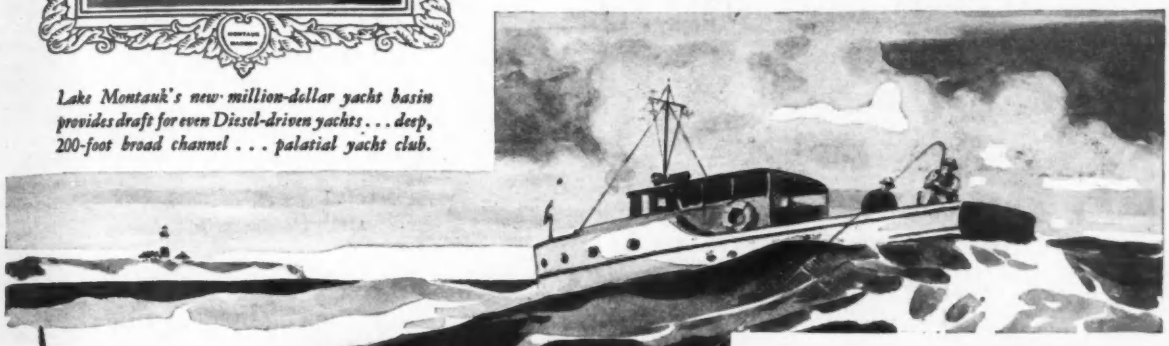
Clogging of the water jackets, of course, is not the only thing which will make the engine overheat. Any other difficulty which would retard or stop the circulation of water entirely will have the same effect. Failure of the pump, stoppage in the water piping, or clogging of the strainer will have the same effect. As the practice of feeding circulating water into the exhaust pipe is almost universal, a shortage of water invariably gives us ample warning long before any damage is done. As soon as the water fails to reach the exhaust pipe, the muffling effect of the water cooling the gases is lost and the sharp report of the dry exhaust immediately discloses the lack of water.

(*Continued on page 72*)



Giant Swordfish *and* Tuna
. . . only 3 hours from New York!

Lake Montauk's new million-dollar yacht basin provides draft for even Diesel-driven yachts . . . deep, 200-foot broad channel . . . palatial yacht club.



During July, August and September the big-game fish of the ocean come in abundance into the limpid blue waters off ultra-smart Montauk Beach. There is no off-season! Tuna and swordfish . . . world's champion tackle-smashers . . are taken on rod and reel!

On cool, starry summer nights talk at the palatial Montauk Manor . . . the Island Supper Club . . . the Montauk Yacht Club . . . vibrates with the day's battle of the century . . . of the record fish that got away.

Fishing, like everything else at this fashionable summer colony on Long Island's slender tip —125 miles out in the Atlantic Ocean—is found in de luxe form. Boats—the most modern fishing cruisers. Guides—experts who have fished all seas.

Yet fishing is but a single diversion. On Montauk's heather-clad downs are two superb 18-hole golf courses—replicas in soil, turf, setting and plan of Britain's best. A million-dollar yacht basin to shelter cruisers and yachts. Thirty miles of bridle paths . . . fox hunting . . . coaches-and-four . . . polo. A wide, gaily-lit boardwalk 1,600 feet long—and surf bathing 125 miles nearer the Gulf Stream. This summer . . . come with your family to Montauk Beach. The peerless spot for a summer home. 10 degrees cooler. Quickly accessible from New York by rail, motor and water.

Make reservations now at the Montauk Manor or write for full descriptive literature. Montauk Beach Development Corporation, Montauk, Long Island. New York Office, 450 East 52nd Street, Telephone Plaza 0783.

montauk beach

ON LONG ISLAND'S SLENDER TIP

21 New Dawn Cruisers Have Been Equipped with LUX Systems This Year.

LUX Remote Control System installed in a Dawn 45 ft. Cruiser.

LUX Is Your Fire Department

FIRE on land is serious enough, but at sea where there is no fire department to come dashing to your rescue — —!

The owner of a LUX System, however, carries his own fire department with him, for LUX extinguishes a fire more quickly and completely than even the most expert fireman.

The LUX System illustrated above operates by remote control so that in case of fire the operator is not exposed to the flames. A quick pull of the handle in the control box, and the entire protected area is flooded with a harmless cloud of LUX gas that smothers even the worst gasolene or oil blaze in a few seconds.

LUX Systems are economical—they may be had for as low as $55.

For further information simpy clip the bottom of this advertisement and mail with your letterhead.

Walter Kidde & Company, Inc.
140 Cedar Street
New York

LUX

Fire Extinguishing System

LABELED BY UNDERWRITERS' LABORATORIES

What the Novice Should Know

(*Continued from page 70*)

Check valves in the water piping and pumps will sometimes stick and stop the flow and very often it is only necessary to tap the valves from the outside to free them. In case of more serious clogging, the tops of the valves should be taken off, and any obstructions removed from the checks. A shortage of oil, as we have already mentioned, will also cause overheating and unless the oil is free from grit, the same effect is likely to be found in bearing surfaces. Prolonged running with retarded spark tends to heat up the cylinders because of the larger cylinder area which is exposed to the heat of the explosions when the piston is not at the top of its stroke. This condition would probably be revealed sooner by the sluggish action of the engine than by the heat. In any of these cases of overheating, care should be exercised when the jackets are extremely hot to prevent cold water from coming in contact with them, as the sudden change in temperature is very likely to crack the jacket.

Water piping connections should be examined from time to time to see that there is no leakage and it is always well to provide a short length of rubber hose in connections between the engine and hull to absorb the vibration.

So far little has been said about the summer care of the hull. It would seem to be superfluous to point out the desirability of keeping all parts of the boat as bright and clean as a reasonable amount of work will make them. One of the important things to watch in this connection is the bright work, that is, the parts which are varnished over natural wood. If this is neglected for too long a period, the varnish cracks and exposes the wood to moisture and it is soon discolored. This is especially true of oak, which has a habit of turning black if not protected from the elements. A coat of varnish during the season at intervals of about five or six weeks will work wonders in improving the appearance of the boat, preserving the elasticity of the varnish, and thereby giving the wood the proper protection, which, after all, is the prime reason for painting and varnishing, anyway.

Brass and nickel work, of course, make the best appearance if polished frequently, but this involves considerable labor and not everyone is in a position to devote the necessary time to this work. To get around this difficulty, parts which are not exposed to the rubbing of lines are frequently given a good polish, rubbed down with alcohol, and then given a coat of a prepared lacquer which may be bought for this purpose. In this way the protected parts will remain bright and clean for a considerable length of time. Chromium plating has proved itself to be a very practical finish for boat hardware and several other kinds of alloy fittings are available which retain their bright appearance indefinitely.

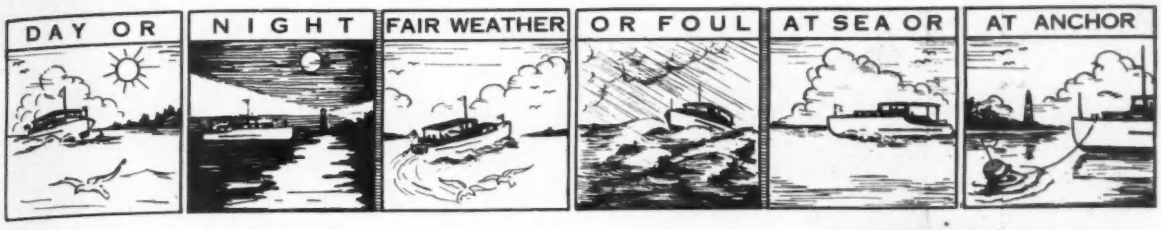
It is a simple matter to wash down the interior surfaces of the boat from time to time with warm water and washing powder, and this is generally sufficient to keep them clean and in good condition for an entire season. Washing powders also prove effective in washing down the outside of the hull, and several other cleansers in cake form can also be used conveniently. In any case, a liberal application of elbow grease is the principal requisite.

Copper bottom paints generally last throughout a season, although trouble is experienced in certain waters regardless of the kind of preparation used. In such cases, where the bottom has a tendency to foul, it is advisable to devote a day or two to hauling out and freshening up the bottom with a new coat. Most copper preparations do not require that the hull be dry when the paint is applied, nor is it necessary to wait for the paint to dry before launching, so little time need be lost on this mid-season work.

The bilges should also come in for their share of attention, although it is not the most agreeable task to get down and scrub out the grease and grime which invariably accumulates in the bottom of the boat. If this is done occasionally, however, the labor involved in doing this job in the spring overhaul will be considerably lightened and it will also be found that the bottom planking is better preserved. Oils and greases in the bilge are generally responsible for the rotting of the caulking along the garboard and other bottom seams.

While all this may sound like a rather extensive program for the maintenance of a small boat through the summer months, in a practical way it takes but very little time, and a half hour spent now and then in brightening things up results in a boat of which the owner may be proud. In the next article we shall outline some of the regulations which should be observed when the boat is being operated.

(*To be continued*)



Always On the Job!

Oberdorfer MASTER

Automatic Electric BILGE PUMP

It is a great satisfaction to know that there is a mechanical watchman at your pump day or night, in fair weather or foul, at sea or at anchor. An Oberdorfer Automatic Electric Bilge Pump is a vital necessity to protect your boat and the lives it carries. A great convenience besides—eliminating all the worry and work of bilge pumping.

The Master is built for heavy duty and is available in 6, 12 and 32 volt units.

The Improved Model "B" is available in 6 and 12 volt units.

Both models are compact and will fit easily into an out-of-the-way space in your bilge. Built entirely of non-corrosive metals they are unaffected by the action of salt water.

They operate on ordinary lighting or ignition storage batteries and consume very little current.

M. L. OBERDORFER BRASS CO.

Builders of Pumps Since 1875

2200 Thompson Road Syracuse, N. Y.

Oberdorfer Pumps

MASTER

The Improved Model "B" Automatic Electric Bilge Pump is available in 6 and 12 volt units. Height 10". Three-wire cable connection makes wiring easy. Capacity up to 350 gallons per hour.

Improved Model "B"

Oberdorfer Hand Bilge Pumps are sturdily built and are a necessity on every boat. Handle stores in locker when not in use.

Hand Bilge Pump

Oberdorfer Bronze Gear Pumps are available in types, forms and sizes to fit every make and model of marine motor. Also used for converted automobile motors.

VICTROLA NO. 2-55
LIST PRICE $35

"STAND BY FOR MUSIC"

Carry the portable Victrola aboard, and old stowaway *Monotony* sneaks back ashore. Here is the safeguard of the sailor's happiness—music that satisfied every mood . . . The portable Victrola gives marvelous reproduction that's perfect with jazz or symphony. It has the Orthophonic-type sound-box—remarkable volume. As with larger Victrolas, records stop automatically after playing. A special feature makes winding easy on any surface. Light—indestructible . . . The portable Victrola is as convenient and smart as a fine overnight bag. The ideal all year round instrument for the apartment, too . . . Afloat or ashore, don't be satisfied with less than the best. Enjoy your portable Victrola now!

Portable Victrola

YARD AND SHOP

(*Continued from page* 60)

ship in the American Power Boat Association. They are the Sea Island Boat Club of St. Simons Island, Georgia; the Juneau Yacht Club of Juneau, Alaska; the Schenectady Yacht Club, of Schenectady, New York, and the Everett Motor Boat Club of Everett, Washington.

FIFTH ANNUAL CORNFIELD LIGHT RACE

Saturday, August 31, is the date set by the Huntington Yacht Club for the Fifth Annual Race around Cornfield Light, and a general invitation is extended to owners of auxiliaries to participate in this race. It is open to all cruising sailing auxiliaries, in cruising trim, of not over 40 feet overall length and the course as usual will be from Lloyd's Harbor around Cornfield Light Vessel and return with an approximate distance of 106 miles. The start and finish will be on a line between Old Lloyd's Light and the Committee Boat, the schooner Sunbeam. Gas and time allowances will be made according to the various motors and lengths of the diffeernt yachts. Entries close on Tuesday, August 22, and blanks should be mailed to Hilary Corwin, Bank of Huntington Building, Huntington, Long Island.

FRENCH FISHING BOAT CONTEST

A report from the Department of Commerce contains the information that between September 29 and October a motorized fishing boat contest is to be held at Lorient, France. The Director of Customs states that boats and motors entered in this competition will not be subject to duty providing they are re-exported within two months after the close of competition. For the benefit of American manufacturers, the Automotive Division of the Department of Commerce has available several copies of the forms explaining the conditions of entry, etc., which they shall be glad to lend.

DART DISTRIBUTOR FOR NEW YORK

The manufacturers of Dart runabouts announce that the distribution of their boats throughout the states of New York, Connecticut, New Jersey and parts of Florida is now being handled by Dart Boats of New York with offices at 11 West 42nd Street, New York City. Everett S. Glines, familiarly known to the marine trade as the New York manager for Garlock and Brewster, distributors of Corsair Cruisers, is to be in charge of the new division.

ANOTHER ELENA

Wm. B. Bell of New York has just purchased a new 32-foot Baby Gar runabout, which has been christened Elena. Mr. Bell uses his boat a great deal, dashing back and forth from the Montauk Yacht Club's East 52nd Street station or the New York Yacht Club's East 26th Street station out to City Island, Larchmont, Glen Cove, Oyster Bay and such places, where he sails his boats in the weekly regattas. The new boat is to be used primarily for commuting and as a tender for his sailing craft.

Mr. Bell finds that the fast runabout affords an excellent means of taking his guests back and forth quickly and that they ride with the greatest comfort, perfectly dry, and make better time than they could in any other manner.

A REQUEST FROM GUIANA

Interest in boating activities continues to develop steadily in foreign countries as well as in America. Word received from a British Guiana yard indicates a good deal of enthusiasm and activity in that country and this concern wishes to address a request to American manufacturers. They would appreciate having builders, dealers and manufacturers of boats, engines, accessories, etc., send them any catalogs or other information available concerning their products. This material should be addressed to Nassy's Boat & Launch Works, LaPenitence, Demerara, British Guiana.

N. J. PAINT SALESMAN HONORED

In recognition of his services over a period of forty years the New Jersey Paint Works recently tendered a surprise dinner to Harry Simpson, who started with the company as a salesman in 1889, making a record for this dean of New Jersey paint salesman of forty years of continuous selling. Many of the executives and other salesmen of the company were present at this banquet, and Mr. Simpson was presented with a watch and chain by the president. Harry Louderbough, as a token of the company's appreciation. Mr. Simpson was the first salesman hired by this company and has traveled the entire Atlantic Coast, and at the present time is covering the coast of Florida, the Carolinas, the South Jersey shore and the Long Island waterfront.

CAR DEALERS TAKE ON BOATS

A significant point in the development of the motorboating industry was recently established with the announcement that the Garber-Buick Company, of Saginaw, Michigan, would serve as the Chris-Craft distributor in this territory. The company has long been known among automobile men as one of the oldest and most outstanding of the Buick dealer list, having handled this famous line of cars for well over twenty years.

Garber-Buick was one of the first automobile agencies in the country to have a modern salesroom, pioneering this idea when other automobile dealers were satisfied to be mere garages, without an adequate display of the automobiles they were representing. Garber-Buick was also a pioneer in the modern service station idea, having established a standardized service department when automobile repairs were conducted throughout the entire country on a more or less haphazard basis.

It is an important step forward, not only for Chris-Craft, but for the entire boating industry when such old-established and conservative firms as Garber-Buick come into the boating business, to carry fine motorboats in addition to their regular lines of motor cars. It indicates a stability and permanence in the motorboating industry that, as little a time as five years ago, were undreamed of by any save a few forward-looking pioneers. In view of these recent developments, it seems safe to prophesy a day, not many years hence, when motorboat showrooms will have become as commonplace as those now devoted to the sale of the better grade automobiles.

(*Continued on page* 124)

Advertising index will be found on 3rd last page

HAPPY?

Right now, heaven is practically here; if you have a boat, and if she's the sort of boat that thrills you when she's under way, and keeps you fairly poisoned with pride whether she's skimming the wavelets or lying nonchalantly at wharf or mooring.

If not, it certainly isn't heaven. You may find your own word, for we are not the ones to make a bad matter worse by being too specific.

For immediate and permanent relief, however, a Baby Gar is prescribed.

Our "Save the Summer" campaign has taxed the Gar Wood shops to the very limit, but from our stocks or those in the hands of nearly 100 dealers we can probably get you the particular Baby Gar you want.

Don't wait. Don't put in another week-end like the last one—it isn't necessary. Wire at once model wanted, when and where.

You may order Baby Gar with sublime confidence, assured of a boat that is sleek, staunch, soft riding—eagerly responsive to wheel and throttle—a masterpiece from the same designers and craftsmen who built Miss America VII, the fastest boat in the world.

Baby Gar "30"	$ 2,950	$ 3,550
Baby Gar "40"	4,500	5,350
Baby Gar "50"	8,950	10,950
Baby Gar "55"	10,950	12,950

GAR WOOD *Inc.*

THE GREATEST NAME IN MOTORBOATING

429 Connecticut Ave., Detroit

1862 Broadway at 61st St., N.Y.C.

Universal Policy

Means Fair Dealing

YOU'LL PROFIT by dealing with any of these Universal Distributors or any of the hundreds of Universal Dealers working through them.

★

Onthank-Rich Co., 257-259 Atlantic Ave., Boston, Mass.

Mr. H. Mikkelsen, 44 Warren St., New York City

Syracuse Boat Corporation, 930 South Salina St., Syracuse, N. Y.

Rochester Marine Co., Rochester, N. Y.

Hunting Supply Corp., Watertown, N. Y.

Johnson & Towers, 126 Arch St., Philadelphia, Pa.

Mahon & Gall, Inc., Pratt and Gay Sts., Baltimore, Md.

Davis & Child, 1312 14th St., N. W., Washington, D. C.

Nye, the Engine Man, Norfolk, Va.

Gibbs Gas Engine Co., 26 South Main St., Jacksonville, Fla.

Mr. J. Frank Knorr, 528 N. W. 7th Ave., Miami, Fla.

Mr. Wm. Habicht, 115 S. W. South River Drive, Miami, Fla.

Chas. Green Co., 1221 Florida Ave., Tampa, Fla.

Mr. W. M. Harley, Fort Myers, Fla.

Pensacola Electric Garage, Pensacola, Fla.

Alker-Donovan, Inc., 435 Camp St., New Orleans, La.

Mr. Wm. F. Meier, 1220 Warren Road, Lakewood, Cleveland, Ohio.

Falls City Boat Works, 132 North 4th St., Louisville, Ky.

C. E. Kennedy, Foot of Beal Ave., Memphis, Tenn.

W. L. Masters & Co., 800 N. Clark St., Chicago, Ill.

Everett Hunter Boat Co., McHenry, Ill.

Belle Isle Boat Works, 8777 East Jefferson Ave., Detroit, Mich.

L. J. Stevenson, Gra-Jac Gables, Holland, Mich.

R. P. Hamel, Cedarville, Mich.

Motor Power Equipment Co., River Blvd., St. Paul, Minn.

Covert Boat & Engine Co., 1330 McGee St., Kansas City, Mo.

Southern Engine & Pump Co., 615 Washington Ave., Houston, Texas.

Harry F. Alves Service Station, 1440 N. Flores St., San Antonio, Texas

Fellows & Stewart, Wilmington, Calif.

Savoy Garage, Second & C Sts., San Diego, Calif.

B. H. Hebgen Co., 326 Market St., San Francisco, Calif.

Cook & Foster, Inc., 12th & Bond Sts., Astoria, Oregon

Pacific Marine Supply Co., 1223 Western Ave., Seattle, Wash.

Pacific Marine Engine Co., (*Distributors for Alaska*) 906 Western Ave., Seattle, Wash.

CANADA

A. Beliveau, 663-667 St. James St., Montreal, Que., Canada

L. L. Harrison, Evinrude Motor Co., 64 King St., W., Toronto 2, Ont.

J. W. Stone Mfg. Co., Ltd., P. O. Box No. 90, Kenora, Ont.

Hoffars, Ltd., 1844 Georgia St., W., Vancouver, B. C.

Alberta Motor Boat Co., Edmonton, Alberta

Breen Motor Co., Winnipeg, Man.

And 50 other Distributors in 40 foreign countries.

from over

800

Dealers and Distributors

WHEREVER waterways may take you—at home or abroad—you'll never be far from one of Universal's more than eight hundred distributors and dealers. And wherever they may be you'll find them loyal to Universal owners.

We are proud of these dealers and distributors. They have been carefully selected; and by close co-operation Universal's well known policy of fair dealing with customers has been maintained through the years.

When you buy a Universal Motor you can be sure that the Universal organization—factory, distributor, and dealer alike—will do everything possible to see that you get maximum service from your motor.

UNIVERSAL MOTOR CO. Dept. MBG-8 Oshkosh, Wisconsin

NOT CONNECTED WITH ANY OTHER FIRM USING THE NAME "UNIVERSAL"

Universal MOTOR CO.

Whenever you see this emblem you may know that it is a pledge of fair-and-square dealing

MARINE MOTORS

Advertising index will be found on 3rd last page

When you crave the peace of the deep sea lanes

You'll love the silky silence of Universal power

Part of Universal's policy of building marine motors for marine work, lies in the development of a marine motor that does its job quietly, smoothly, effortlessly. Universals are quiet. They are perfectly balanced—dynamically balanced. Every working part is housed. Bearings are oversize and carefully fitted. There's no more racket to a Universal Motor than there is to a ground swell. You'll appreciate that on quiet nights when your course is down the path of the moon—you'll appreciate it on those day-long runs when you want to be alone—or nearly alone—with your boat and the sea.

UNIVERSAL MOTOR COMPANY
Dept. **MBG-8** Oshkosh, Wisconsin

NOT CONNECTED WITH ANY OTHER FIRM USING THE NAME "UNIVERSAL"

New York Showroom, 44 Warren Street
London Showroom, 22 George Street, Hanover Square West

A Universal-equipped Dodge Watercar. The 20-ft. Sport Model, powered with a Universal Six. Speed 31 miles per hour.

Also the Universal

Single Cylinder
6-8 H. P.

Flexifour
10-15 H. P.

Superfour
35-50 H. P.

Eight
110 H. P.

UNIVERSAL MARINE MOTORS

One of the outstanding members of the Universal line. Six cylinders, 3½ by 4½, 75 horsepower—or 85 for those who want higher speed. Extremely light weight. Compact, ready accessibility of working parts. Available either for direct drive, or with the Universal silent, built-in reduction drive in ratios of 2¼ to 1 and 1¾ to 1. True right-hand and true left-hand motors can be furnished without extra cost for twin installations.

Send for our new catalogs

In case you want a Matthews Cruiser for Fall delivery to Southern waters

---*this is a friendly note of warning*

Even working overtime, as Matthews has been doing month after month . . . with the greatest pressure on every unit of the Matthews plants . . . it will apparently be next to impossible to fill all the orders for Matthews Cruisers that will be received for Fall and Winter delivery to Southern Ports. . . . Production schedules have been increased to the limit . . . but the increasing popularity of Matthews Cruisers continues beyond our ability to supply. The number of boats leaving the Matthews plants this year far exceeds any previous record of shipments. It has not been humanly possible to satisfy every delivery requirement. And so this friendly warning is issued, in case you are thinking of a Matthews for your Fall and Winter cruising in Southern waters. . . . Early placing of your order is of the greatest importance to avoid disappointment. It is our earnest desire to satisfy your ideas of delivery time . . . and to that end your cooperation will prove most helpful. . . . And for winter sport, no other boat quite satisfies as does a Matthews Cruiser . . . with its staunchness for every emergency . . . its livable companionship . . . its varying types, for every conceivable sort of use, . . . the forethought for your comfort in the provision of a host of little refinements . . . the husky motor . . . the increased speed . . . and in the extreme value, too, which these most popular of cruisers afford.

MATTHEWS "46"

Illustrated on this page is the Matthews "46" Stock Cruiser with enclosed bridge . . . a luxurious and able motor-yacht. In addition to spacious accommodations for a party of seven, there is complete provision for a one-man crew. It would be hard to imagine a more ideal family-home on water. And this is a fast cruiser . . . maximum speed 18 m.p.h. or better . . . cruising speed 16 m.p.h. . . . with standard power. . . . Also available with open bridge. Write for complete descriptive folder.

Advertising index will be found on 3rd last page

---and in case you want the sportiest play-boat---the swanky Matthews "38" SPORT CRUISER *must be your choice*

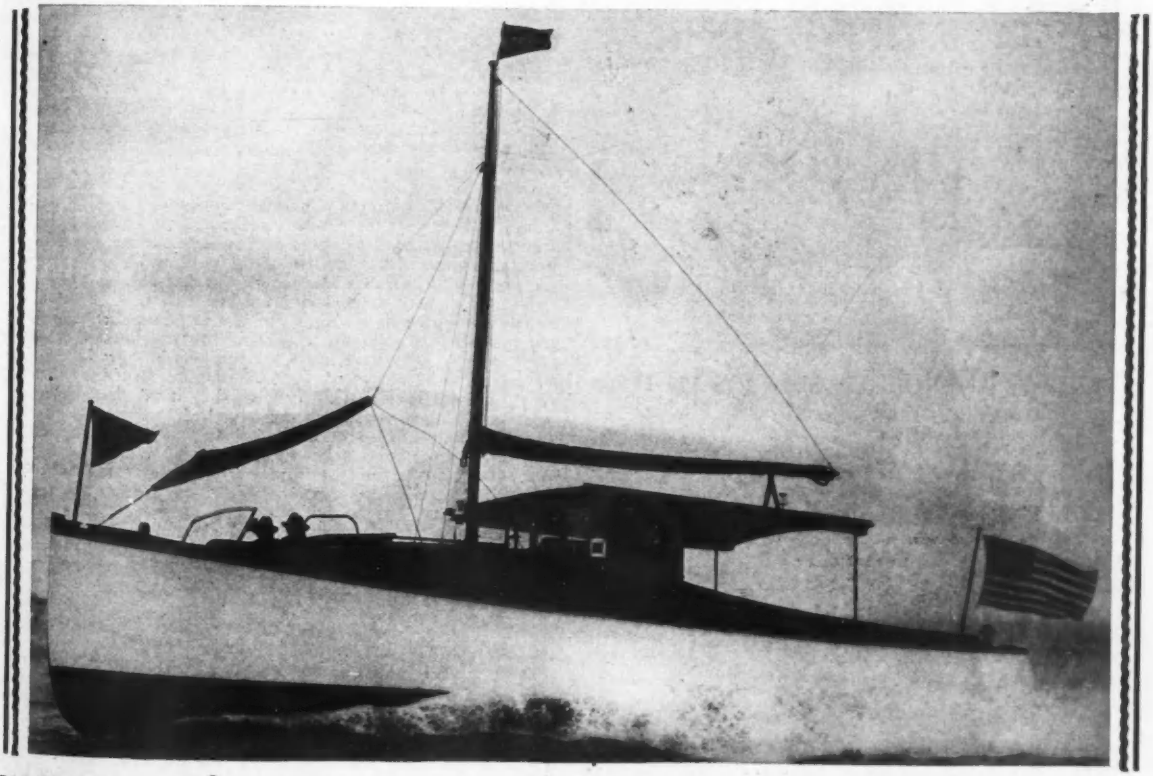
"Matthews 38"

The Sport Cruiser is one of the "Famous Family Matthews 38" Stock Cruisers, which also includes Single and Double Cabin Cruisers, Day Cruisers, and the Sport Fisherman Cruiser—five different models. . . . Matthews Stock Cruisers offer the greater value which is made possible only through volume in both production and sales. . . Illustrated folder of the "Famous Family Matthews 38" . . . or of any particular Matthews Cruiser . . . will be sent on request.

Here is a boat that has honestly earned the affection of the boating fraternity. A husky pal with a swagger all its own. A performer of outstanding capabilities . . . a boat delightfully varied in its usefulness. The missus and friends may enjoy it for the afternoon, with bridge and tea in the big after cockpit as a part of the program. The men find a multitude of advantages in it for deep-sea fishing or in the shooting season, with ample provision for packing away all kinds of hunting and fishing traps for the day run or the more extended cruise. Deep-sea tackle can be freely handled . . . deep-sea fish boxes easily stowed away. . . . In addition to the big aft cockpit there is the cockpit forward, seating four, and the cabin with four Pullman berths, spacious drawers, lockers, and complete toilet and galley. . . And speed! . . . 18-20 m.p.h. with 150 h.p. Kermath engine as standard equipment, up to 28-30 miles per hour with special engine installations. Write for complete folder on this truly remarkable boat.

THE MATTHEWS COMPANY, PORT CLINTON, OHIO

Designers and Builders of Boats of Distinction—Since 1890



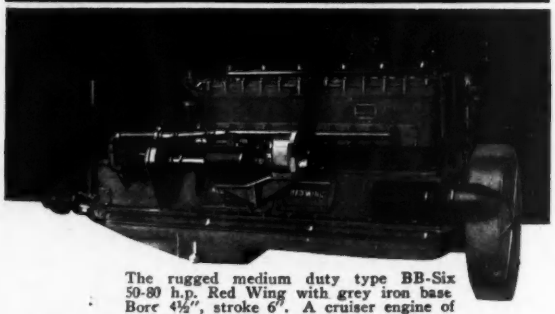
SALES AND SERVICE: BELLE ISLE BOAT AND ENGINE CO., 8777 E. Jefferson Ave., Detroit—BRUNS, KIMBALL & CO., Cor. Fifth Ave. and 15th St., New York City—WM. V. MASSON, 421 Munsey Bldg., Baltimore — WALTER H. MORETON CORP., 1045 Commonwealth Ave., Boston — LAKE ERIE YACHT BROKERAGE CORP., 1365 West 117th St., Cleveland—MISSISSIPPI VALLEY YACHT SALES, Times Bldg., Alton, Ill. — R. SEALY, Commerce Bldg., Galveston, Texas — ROBERT V. STAATS. Inc., 3000 Wilshire Blvd., Los Angeles—J. A. SCARLETT, 436 East 2nd St., Cincinnati.

Red Wing Thorobred
THE MOTOR WITH POWER TO SPARE

Peace o' mind is just about the biggest thing of all in boating. To hear the smooth running purr of a compactly constructed motor is one of the most comforting sounds in the world . . . especially when you *know* it is a permanent purr.

That is probably the deciding factor in the wide choice of Red Wing Thorobred Motors—particularly the "Little Chief" BB6. This fine powerplant *always* gets you there and back—free from trouble—and in addition, with an ease that bespeaks its genuine construction and abundant reserve power.

If you would know more about one of the finest marine motors of today, write for illustrated catalog fully describing the BB6.



The rugged medium duty type BB-Six 50-80 h.p. Red Wing with grey iron base Bore 4½", stroke 6". A cruiser engine of lasting satisfaction, completely equipped, and the last word in design.

Eighteen THOROBRED Sizes 4 to 150 H.P.

4-CYLINDERS

D 10-14 h.p.—2⅝" x 4"
AA 18-24 h.p.—3¼" x 4⅜"
F 28-36 h.p.—4 1/16" x 5"
B 32-40 h.p.—4½" x 5"
BB4 40-50 h.p.—4½" x 6"
BB4 HS 45-70 h.p.—4½" x 6"
Big Chief 50-60 h.p.—5" x 7"
Big Chief Special 75-90 h.p.—5¾" x 7"

6-CYLINDERS

Warrior 30-50 h.p.—3½" x 5"
Arrow 40-80 h.p.—3⅞" x 4½"
BB6 MD 50-80 h.p.—4½" x 6"
BB6 HS 80-110 h.p.—4½" x 6"
BB Sp. 6 MD 75-100 h.p.—5" x 6"
BB Sp. 6 HS 100-150 h.p.—5" x 6"
Big Chief Six 85-110 h.p.—5" x 7"
Big Chief Special Six 110-150 h.p.—5¾" x 7"

1 AND 2 CYLINDERS

K 4-5 h.p.—3¾" x 4¾" KK 7-8 h.p.—3¾" x 4¾"

RED WING MOTOR CO.
RED WING, MINN.
EASTERN DISTRIBUTORS

W. H. Moreton Corp., 1043 Commonwealth Ave., Boston
Verrier, Eddy Co., 201 East 12 St., New York City
W. E. Goehenaur Mfg. Co., 631 Arch St., Philadelphia
F. B. Eisenbrandt, Foot of Light St., Baltimore, Md.

The Work of the Coast Guard

(*Continued from page* 35)

in service throughout the war period. They had seen hard usage and were in such shape as to require extensive repairs. Rather than expend the money necessary to place these boats back in service, they were placed out of commission and newer and more modern boats which were then being completed were placed on the active lists of the Navy. A few years later when the needs of the Coast Guard required more boats this fleet of destroyers was turned over to the Coast Guard and, with limited funds, the service was able to place these boats in running order and has been successful in keeping them patched together ever since. These boats are today antiquated and in such condition as to require enormous amounts of money to keep them in serviceable condition. While the Coast Guard is struggling along with these vessels, the Navy Department has large numbers of modern destroyers which are not in commission but which would make excellent boats for the service of the Coast Guard. Since a boat which is in active commission and use will deteriorate less than one which is laid up, it would seem to be the wise and economical thing to do to turn over sufficient of these modern boats to the Coast Guard and scrap the 15-year-old boats which they are now using, and which have long outlived their economical usefulness.

The type of boats commonly called cutters are an entirely different type of ship from the destroyers which are called on now to carry on the offshore patrol. These cutters are abler and more modern vessels, and naturally somewhat slower than the swift destroyers, which were built for an entirely different purpose. It is boats of this kind equipped with the most modern Diesel electric power plants which are used on the International Ice Patrol in the waters of the North Atlantic. These boats alternate on this patrol and spend a month at sea and in this time follow up the course and drift of every dangerous iceberg which comes down from the north. They keep track of them and send frequent radio warnings to all shipping as to where the danger points are and how far south the steamer's tracks must be laid to clear the dangerous areas. Experiments have been conducted with a view to breaking up and destroying these dangerous bergs, but so far these have not met with any marked success. Explosives, unless used in tremendous quantities, will simply break a berg into somewhat smaller ones, but will not disintegrate it so completely as to make it harmless to shipping. If a berg is broken up into several smaller ones it means that they may scatter, and it will then be necessary to keep track of several rather than only one larger one.

While the ships on the offshore patrol are at sea the time of the crew is fully occupied in routine maintenance work of various kinds. Paint work is cleaned and renewed, necessary repairs are carried out, boiler rooms are overhauled and much useful work is accomplished. Drills for the men are daily occurrences and keep them in trim. Man overboard drills and abandon ship drills call on each man aboard for his little part in the work. A man overboard is a serious problem and crews are trained to get a small boat into the water quickly and rescue the man. Some tests recently were made to determine in how short a time a man could be recovered with the ship at standard speed, 15 knots, and it is interesting to note that it required about six minutes to pick up a man when the method of operation included the complete turning around of the ship to the vicinity of the man and then getting a boat away to pick him up. Another method of accomplishing this result was to call for full speed astern, and in this way bring the ship to a standstill and get the small boat away before it had actually lost headway. With an alert crew it was possible to reach the man in about three minutes time with the small boat by the reversing method, and everyone will concede that a man has a better chance of surviving an accident of this kind if he is hauled into a small boat three minutes sooner than would otherwise be possible. It would seem that it is a better plan to get to the man quickly with a small boat and then pick up this boat as soon as possible.

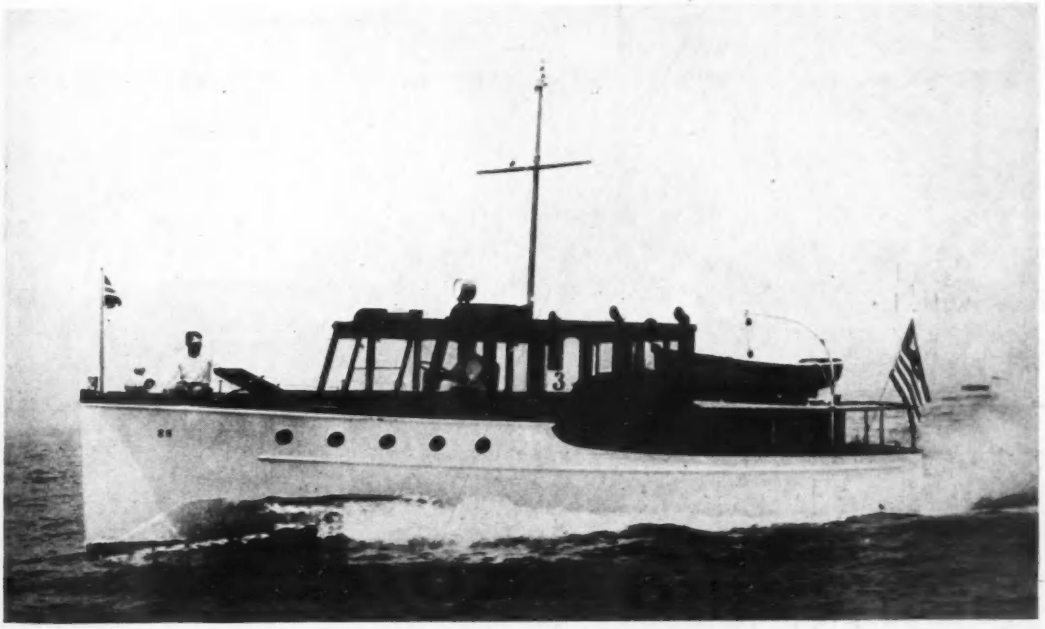
Another drill is the abandon ship, which requires practically the entire personnel to leave the large boat in the small ones. This calls for all of the small boats and life rafts to be put overboard and loaded to their capacity with men and full equipment. Provisions, water, navigating instruments are all loaded into the boats so that they could effect the rescue of all hands if the emergency arose, and each man knows in advance which boat and place he is to occupy. The physical labor involved in getting the heavy boats on and off of the ship is tremendous since these old destroyers are not provided with deck machinery and all boats with the exception of the motor boat are hoisted by hand. The motor boat has to be handled by a long rope which has to be rigged the full length of the ship so that the power of the

(*Continued on page* 86)

Advertising index will be found on 3rd last page

Elco Boating

PUBLISHED MONTH TO MONTH BY THE ELCO WORKS, BAYONNE, N. J.... AUGUST, 1929



Mr. Larner's New Elco Cruiser, Sea Dream IV

LUCKY "SEA DREAM"

WHEN Mr. Larner chose the name *Sea Dream* for his Cruisette four seasons ago he probably was guided only by his fancy and did not realize that *Sea Dream* would be a name held in awe by his competitors in cruiser racing. *Sea Dream II* and *Sea Dream III* brought prizes and fame to him and now *Sea Dream IV* has followed in the wake of her predecessors and won her first laurels in the Block Island Race.

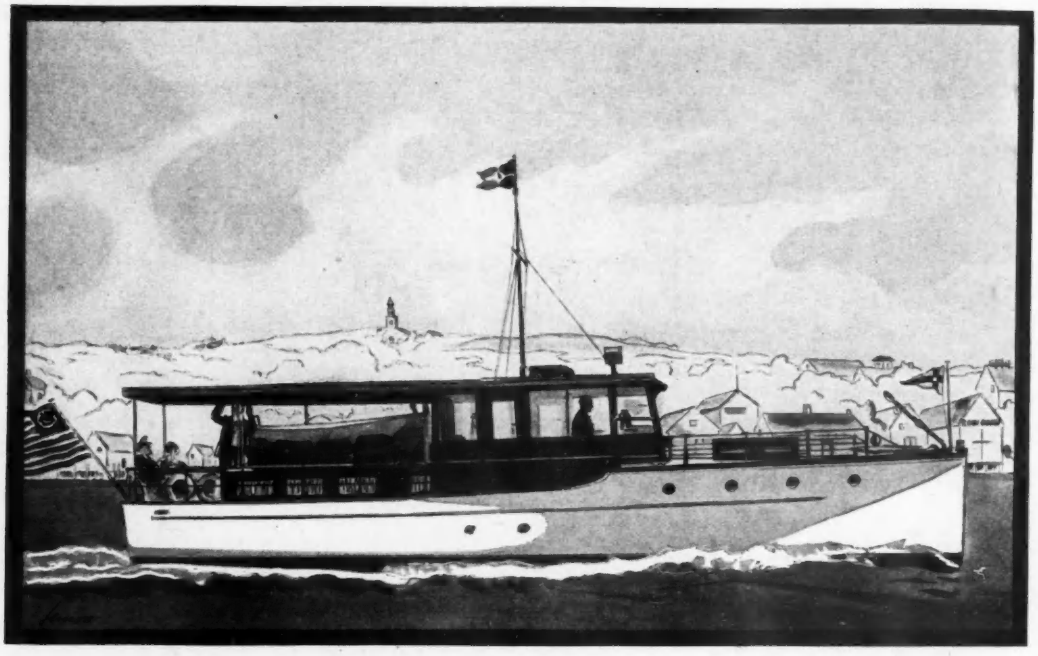
The new boat left Bayonne barely in time to be measured for her handicap, without her upholstery and shy several coats of paint, but that did not prevent her winning in the long grind from Execution Light to Block Island. Few new boats are called on to do their utmost for one hundred nautical miles on a maiden voyage and it is greatly to the credit of her Elco F-62 engine that she not only did it but won the race as well. In fact the only attention the engine received was the addition of a little oil.

Out of a fleet of seventeen starters, *Sea Dream IV* was the sixth boat to finish and first on corrected time. Her speed averaged 11.11 knots, quite remarkable in view of her great displacement, for she is a heavy beamy boat.

Sea Dream IV is a special 39 foot Elco Cruiser in whose arrangement and fittings many of Mr. Larner's own ideas are incorporated. Some of her features are quite novel and it is possible that she is a forerunner of the future cruiser. Forward is a very large and well equipped galley, much more elaborate than usually found in a boat of her size. There is also a toilet room accessible from the bridge. The deck house is very large, and in addition to the function of a living space, it has two built in Pullman berths. Steering gear and controls are at the forward end. The wheel is of runabout type and the helmsman and a companion are seated in bucket type seats that slide fore and aft and swivel to permit easy access. The crew report that a trick at the wheel was anything but tiring. Aft is a double stateroom with much locker space and its own toilet room. Deck accommodations include a small bow cockpit and a wide and pleasant after deck.

It is a great satisfaction to Elco to have the new *Sea Dream* begin her carer so auspiciously. The quality of reliability for which Elco is constantly striving not only wins races but provides the kind of service which the yacht owner demands of his cruising boat.

DOWN TO THE SEA *in comfort*



AT the age of fifteen, during a school vacation, Mr. Sterling Archer* took ship as cabin boy on a barkentine sailing vessel carrying cargo to Florida. It was then the ambition was born which he now finds fulfilled in the Sea Gull*—the handsome Forty-Two of which he is proud to be captain and crew. Here, Mr. Archer says, is the long-remembered thrill of cruising the open water—with none of the discomforts which only youth can overlook. Easy chairs and good beds—a radio—a galley that's a miracle of convenience . . . Life aboard the Sea Gull, always exhilaratingly adventurous, is also amazingly comfortable!

From the first of June until after Labor Day, Mr. Archer practically lives on board, commuting to New Rochelle. From there he makes week-end trips—along the North Shore, to Shelter Island, to Newport, to Block Island. Sometimes around to the South Shore, or up the Connecticut River to Essex. Last summer, with four guests, he cruised to Marblehead, going up through the picturesque Cape Cod Canal, returning outside the Cape, with a week's stop-off at Nantucket.

Certainly, Mr. Archer says, travel in the Sea Gull is more stimulating, more restful, than any other form of recreation he knows. Day after day the invigorating joy of sea air and open sky—always in the independent comfort of a compact, perfectly appointed home on the water.

• • •

The history of every Elco boat is as thrillingly individual as the man who owns it. For each owner finds in the opportunity for independent voyaging a constant stimulation and a challenge, and each responds in a characteristic way.

At Port Elco, where we will be glad to receive you at any time, you can get right aboard a Forty-Two (or any other model on display) and make your own tour of inspection. Or we will send you on request Catalog MBG.

PORT ELCO (*Permanent Exhibit*)
247 Park Ave., at 46th St., New York.

Distributors in Boston, Detroit, Los Angeles, and Fort Lauderdale.

Plant and Marine Basin, The Elco Works, Bayonne, N. J.

The Elco Fleet: Twenty-Six, $2,975; Veedette, $4,875; Cruisette, $5,950; Thirty-Eight, $10,750; Forty-Two, $16,500; Fifty, $25,500.

*Although this series of advertisements recounts bona fide experiences of Elco owners, the names used are fictitious.

ELCO SPECIAL 56 FOOT MOTOR YACHTS

MENTION has been made in an earlier issue of Elco Boating of three special 56 foot cruisers building for three gentlemen who had formerly owned standard Elco boats. All of these boats were delivered in June; the *Pelican* to Mr. Bruce Clark, *Alsonel V* to Mr. C. Alan Hudson and *Blue IV* which went to the Eastern end of the Sound.

The photographs are of *Lure IV*, but serve well to show the type, as the external appearance of each is almost identical. They are handsome craft, sturdy and shippy looking. Although they appear larger than they actually are, still there is no indication of the great amount of room both above decks and below.

The ELCO 56-Foot Motor Yacht

The after quarters on each boat differ in arrangement but in general comprise a large double stateroom and two smaller staterooms with either one or two baths. Each plan was drawn to meet the particular requirement of the owner and it was amusing, during the construction of the boats, to hear each owner's criticism of the other arrangements, his own being, of course, ideal for him.

The forward part of the boat is given over to the working end, comprising in each case a forecastle with two or three berths, a crew's toilet room and a particularly fine galley. Here again the plan is somewhat different, but only in minor detail.

The deck house is perhaps the show feature of the boat. Not being used for navigation it becomes a particularly large living and dining room with perfect vision in every direction except dead aft and with the utmost comfort in its arrangement and furnishings. On *Lure IV* a fire place is built against the after bulkhead which promises to be delightful on cool Fall days, although on the day of its test at Bayonne an open fire seemed the least desirable thing in the world.

The navigating bridge which is above and behind the deck house not only provides an ideal place from which to handle the boat, but also has a fine wide seat at its after end from which vision in every direction is unobstructed and which gives the feeling of being on a much larger craft.

The Bridge Arrangement of the 56-Footers

Engines and auxiliary machinery are located below the deck house in an engine room which has more than usual space. Access is had by a door from the galley and by a trunk at the after end to the deck. The power plant of *Pelican* and *Alsonel* consists of a pair of Elco F-62 engines of 125 H.P. each. *Lure* is powered with two 100 H.P. Hall Scott engines driving through reduction gears. A speed of 15 miles is obtained with the higher power.

The whole feeling of these boats is one of substantial solidity. There is nothing cockleshell or egg crate about them, and under way or at anchor they give the impression of being small ships rather than large boats. The owners' expressions of satisfaction have been a most welcome reward to those of us who have given our best efforts in the planning and building of them.

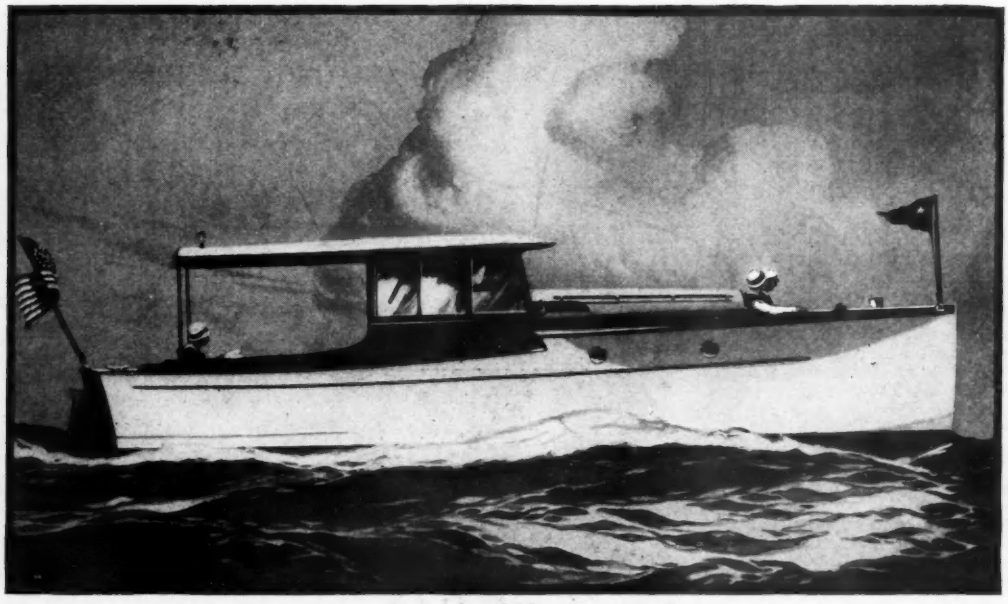
The Luxurious Deck House on Lure IV

* * *

Record ELCO Sales for 1929

If any further evidence of the greatly increasing popularity of yachting is needed it can be found in the Elco Plant today. The place is positively deserted in comparison with its winter population of boats. Building and storage sheds are almost bare and boats in the basin are only transient visitors in for a coat of paint or some needed adjustment. By July first practically everything Elco had for sale, either new or used, had been purchased by a public eager to get afloat. Some of the new boats, particularly the extremely popular Veedettes cannot be delivered until late in July or early in August, and at present writing are still under construction. But it can fairly be said that the Elco year's production of boats has been sold out. Late comers are unfortunately disappointed and the existing situation is concrete proof of the fact that the prospective boat owner for next season can do no better than to cast about and begin to make his selection now so that he may start his season next May and not next July.

The new Elco Veedette . . . *speedy, seaworthy, comfortable*



HERE'S your ideal combination of cruiser and runabout — the new Elco Veedette. Thirty feet overall . . . a graceful, speedy boat, yet one that offers the maximum of comfort, seaworthiness and reliability.

She's the perfect week-end boat . . . this Elco Veedette, built for any water and any weather. There are comfortable accommodations in the cabin for four people — with plenty of room to move around in. She has all the comforts of a larger boat, plus a speed and dash that will surprise you.

Length 30′-11″, beam 8′-6″, draft 2′-4″, V-bottom type. Keel and frames white oak — planking white cedar screw fastened — exterior and interior trim mahogany — cabin top covered — metal work brass and bronze — finish underbody antifouling — topsides yacht white — deck varnish and buff — trim varnish.

Roomy cockpit aft with permanent awning — raised seats with runabout wheel and controls — windshield with long side wings — forward cockpit reached from below. Cabin sleeps four — spring-cushioned transoms and upper berths, 6′ headroom, good clothing stowage space, separate fully-equipped lavatory — galley with two-burner stove, ice-box, sink, drawer and shelves. Fresh water capacity 45 gallons.

Elco-Buda engine under raised section of cockpit — six-cylinder — 85 H.P. — speed 18-20 miles per hour — fuel capacity 75 gallons — cruising range 150-200 miles — controls at wheel, runabout type, for owner operation. Price $4,875. Complete details furnished on request for Catalog MBG.

The Elco Fleet

Twenty-Six	$ 2,975
Veedette	4,875
Cruisette	5,950
Thirty-Eight	10,750
Forty-Two	16,500
Fifty	25,500

Elco
TRADE MARK
MOTOR BOATS

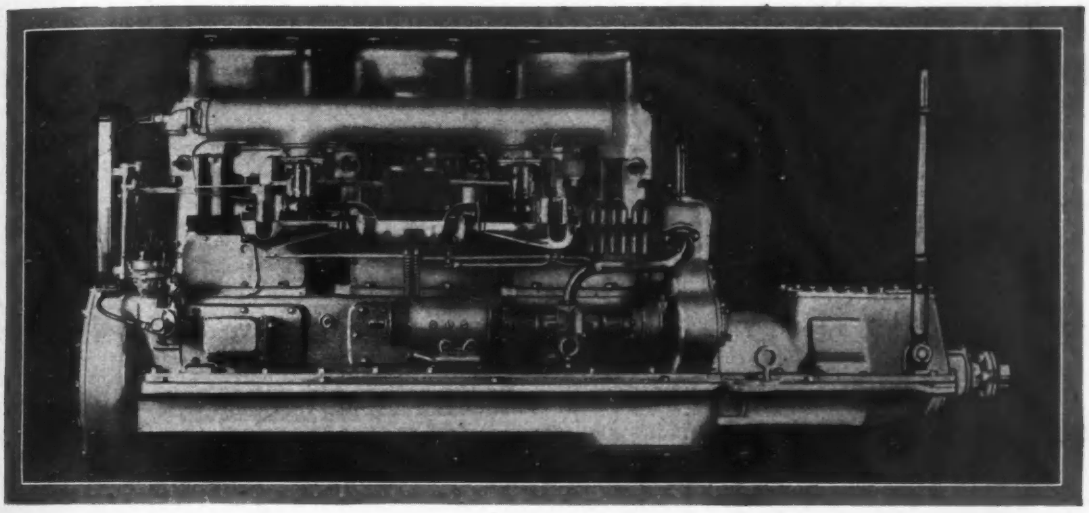
PORT ELCO
(Permanent Exhibit)
247 Park Avenue, at
46th Street, New York

Plant and Marine Basin,
The Elco Works, Bayonne, N. J.

Distributors in

BOSTON — *New England Marine Sales Co., 882 Commonwealth Avenue*
LOS ANGELES — *Yacht & Motor Sales Corp., Wilmington, Cal.*
CHICAGO — *Henry C. Grebe & Co., 400 North Michigan Avenue*
FT. LAUDERDALE, FLA. — *Lauderdale Yacht Basin, Inc.*

AMERICA'S LEADING MARINE ENGINE



Buffalo Dreadnaught

200 H. P. SIX CYLINDERS — 5 7/8 In. Bore — 7 In. Stroke

Buffalo Gasolene Motor Company

1274-1286 Niagara Street
BUFFALO, N. Y.

POWERED BY Buffalo

347 Madison Avenue
NEW YORK CITY

A Marine Speed Indicator and Log

These speed indicators tell you at a glance how fast you are running—they are accurate within 2%. They will show you, if you wish it, your trip mileage, and the total elapsed mileage also.

When navigating by chart and compass a speed indicator is an invaluable aid; and at all times it enables you to hold your boat at her best running speed. The dial can be placed anywhere most convenient for you.

These devices have been fully tested and proved to be dependable gauges. They are giving valuable service to owners of small and large boats of all types.

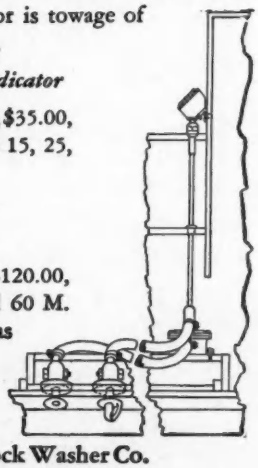
Passage of boat through the water creates the pressure which is indicated on the dials. There is no connection with the motive power, nor is towage of auxiliary apparatus required.

National Marine Speed Indicator

4 Models, $25.00, $30.00, $35.00, $40.00, for speeds up to 15, 25, 35, 60 M. P. H.

National Marine Speed Indicator and Log

2 Models, $100.00 and $120.00, for speeds up to 35 and 60 M. P. H., and trip as well as total mileage.



Write today for our catalog

The National Lock Washer Co.
Newark, New Jersey, U. S. A.

The Work of the Coast Guard

(Continued from page 80)

anchor winch can be used to raise the boat. This is a cumbersome arrangement and while it answers the purpose, it is not a simple matter to handle this heavy boat in this way.

Competition in marksmanship is keen among the crews of the various boats and they meet in friendly competition at stated intervals on the rifle ranges. At sea it is a simple matter to acquire excellent rifle practice as numerous sharks and floating rubbish furnish excellent targets for practice shooting.

This well trained and skillful organization is constantly on watch and ready to lend a hand to all ships at sea which may run into difficulties. There are many cases of groundings, injured propellers, collisions, and similar accidents where the Coast Guard vessels are quickly on the scene, ready to offer help in salvaging both the ships and the crews.

One item of equipment which is universally carried on all of the Coast Guard vessels is the radio compass and this useful device enables the navigator to do many tricks in navigation which were not possible before. For example, it frequently happens that the ship will encounter fog for the entire period of its patrol at sea and be unable to check its position by observations on either the sun or stars. The radio compass makes the navigator less dependent on the weather in this regard, and he is enabled to obtain cross bearings on several radio beacons which are remarkably precise and will enable him to fix his position with confidence. Another use of radio is the ability to obtain a fix from the shore stations which are equipped to supply this service. It is a simple matter to request a position by radio and receive a reply from shore which will fix the ship's position exactly. In fog or heavy weather this is a most useful feature and simplifies the problem of navigating greatly.

Yachtsmen generally are aware of the Federal requirement calling for certain items of equipment to be carried on their boats. All realize that this essential equipment is not required merely for the sake of the officials, but is designed to protect the persons on board the boat in emergencies which may require its use. It is occasionally necessary for vessels of the coast guard to examine yachts and other boats for the purpose of checking over this equipment. If yachtsmen will heed signals which are made to them and yield graciously to such inspections they will find the Coast Guard officers both agreeable and willing to speed them on their way with the least possible delay. Unfortunately, there are some people who feel that such an inspection is an imposition on their rights as citizens and do not realize that an inspection of this kind is a matter of protection to their own boats and crew. Anyone who equips his vessel properly as required by the regulations has absolutely nothing to fear in permitting the Coast Guard officers to come aboard and look his ship over.

All yachtsmen who have had any first hand contact with the officers and crews of the Coast Guard vessels will agree that they are real sailormen, ready and willing at all times to risk their lives to save others and to lend a helping hand to any vessel in distress whenever necessary.

CRUISERS RACE AT KENILWORTH

A group of ten cruisers raced for an attractive list of trophies at the second annual A. C. F. fleet day, held at the Kenilworth Yacht Club June 15.

Following is the list of winners in order of finish:

Name—Owner—Classification

Radio, S. Steel of New York, Group B—not over 30 feet.
Al, R. S. Rasmussen of N. Y., Group B—not over 30 feet.
Owl II, J. B. Powell of N. Y., Group B—not over 30 feet.
Minerva, Meyer Davidson of N. Y., Group C, not over 35 feet.
Gessinga II, John Dentz of N. Y., Group D, not over 40 feet.
Mouse, O. Hirsch of Freeport, L.I., Group B, not over 41 feet.
Edna, R. Robichek, Mt. Vernon, N. Y., Group F, not over 47 feet.
Rothdunlon, B. H. Duncan of New York, Group G, not over 54 feet.
Nina, C. F. Proctor, of Great Neck, L. I., Group G, not over 54 feet.
Stymie, A. A. Brown, Manhasset, L. I., Group G, not over 54 feet.
Follow Thru, Lawrence Schwab, Great Neck, L. I., Seagulls.

In the 15-mile outboard race, W. C. Crawford of New York City, driving a Bossert Pirate with a Class C Evinrude engine, won first prize. Otto Mold, driving My Pop, powered by an Evinrude, won second place, and John H. Gregory of Glen Cove, L. I., won third place. The boats started under an arbitrary handicap arrangement.

Advertising index will be found on 3rd last page

AMERICA'S FINEST MARINE OIL..

GULFPRIDE OILS provide to the highest extent these desirable features necessary for satisfactory operation of marine motors.

1. **Oil economy—due to their extremely long life; resistance to oxidation and low volatility.**
2. **Lowered maintenance — because of proper lubricating qualities and very low carbon and gum forming characteristics.**
3. **Proper lubrication—a grade for each motor and conditions of operation.**
4. **High quality — exhibit minimum change of body under extremes of temperature.**

GULFPRIDE OILS are approved by leading Marine Engine Builders.

Manufactured for Marine engine lubrication in five grades or body designations:

Gulfpride Oil 75 **Gulfpride Oil 120**
Gulfpride Oil 100 **Gulfpride Oil 150**
Gulfpride Oil 200

Free sample vial and recommendations on request

GULF REFINING COMPANY

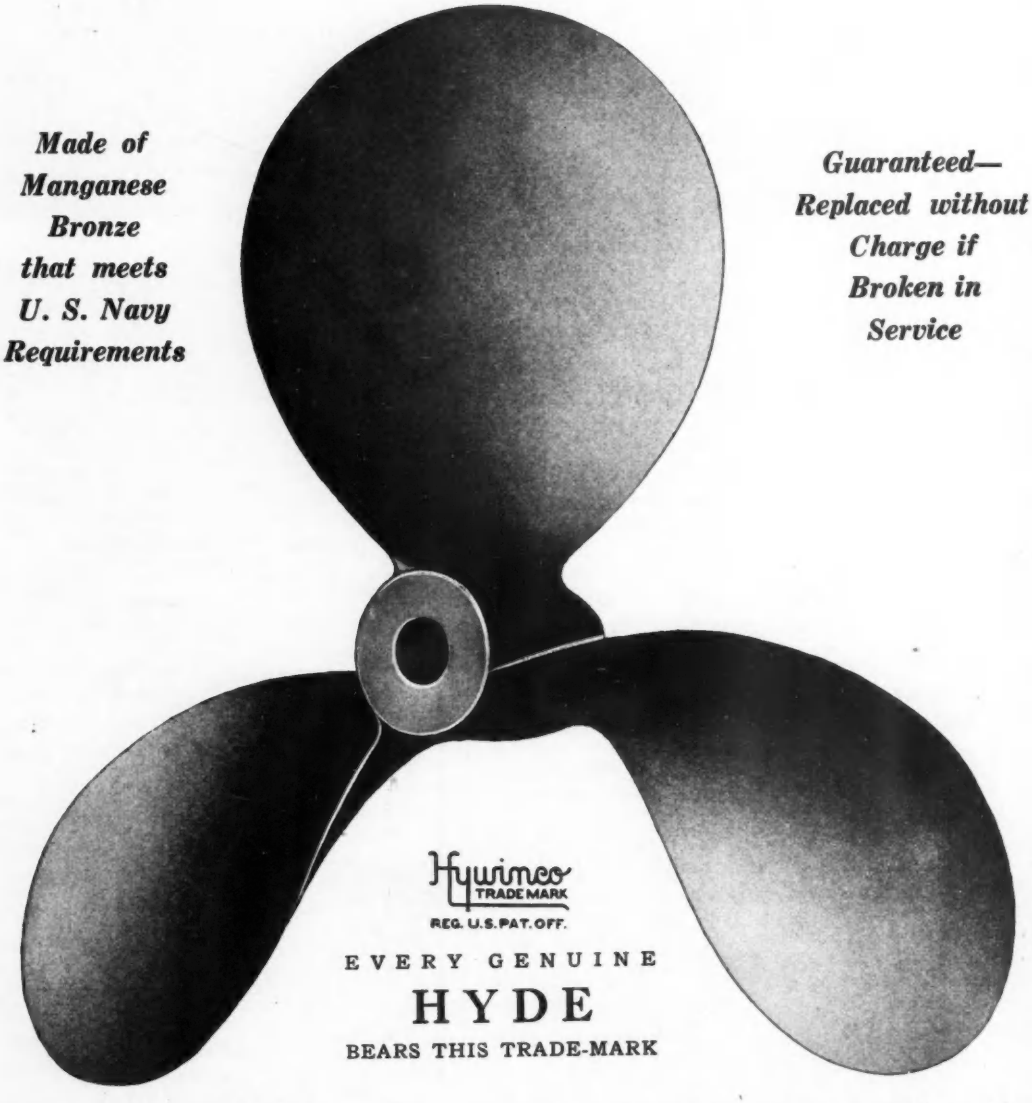
Pittsburgh, Pa.

GULF

HYDE
PROPELLERS

Made of Manganese Bronze that meets U. S. Navy Requirements

Guaranteed— Replaced without Charge if Broken in Service



Hyvinco TRADE MARK
REG. U.S.PAT.OFF.

EVERY GENUINE
HYDE
BEARS THIS TRADE-MARK

All HYDE PROPELLERS are accurately pitched and balanced. Immediate shipment on all regular sizes. Repairing and repitching old propellers a specialty.

Stuffing Boxes, Stern Bearings, Struts, Quadrant Tillers, Lag Screws, and Hanger Bolts. Brass, Bronze, Aluminum and Iron Castings. Tobin Bronze Shafting up to 18 feet long carried in stock.

HYDE WINDLASS COMPANY, BATH, MAINE

Advertising index will be found on 3rd last page

HYDE DISTRIBUTORS

Consult them for Prompt and Efficient Service

SEASIDE PARK, N. J.
Seaside Park Boat & Marine Supply Co.

ATLANTIC CITY, N. J.
Albert Creighton
437 North Massachusetts Avenue

PHILADELPHIA, PA.
Marine Equipment & Supply Co.
116 Walnut Street

NEW BEDFORD, MASS.
Hathaway Machinery Co.
North Water and Elm Streets

PROVIDENCE, R. I.
John McLeod, Jr.
Edgewood Station

NEW LONDON, CONN.
The Darrow & Comstock Co.
114 Bank Street

HARTFORD, CONN.
Clapp & Treat, Inc.
68 State Street

GLOUCESTER, MASS.
Gorton-Pew Fisheries Co.

NEW YORK CITY
C. R. Andrews
143 Chambers Street

FREEPORT, L. I., N. Y.
Hughes-Drake Corporation
31 West Merrick Road

ROCHESTER, N. Y.
Rochester Boat Corporation
Charlotte Station

BUFFALO, N. Y.
Edward Magner & Sons
80 Main Street

BIVALVE, N. J.
Stokes-Schubert

WILMINGTON, DEL.
David A. Hay & Co.
121 Market Street

MOREHEAD CITY, N. C.
Marine Hardware Company

ALEXANDRIA BAY, N. Y.
Hutchinson's Boat Works

RED WING, MINN.
Red Wing Motor Company

CLEVELAND, OHIO
W. F. Meier
1220 Warren Road, Lakewood

OWENSBORO, KY.
Wright Machine Company

JACKSONVILLE, FLA.
Burroughs-McMeekin Company

ST. PETERSBURG, FLA.
Bayboro Marine Ways Co., Inc.

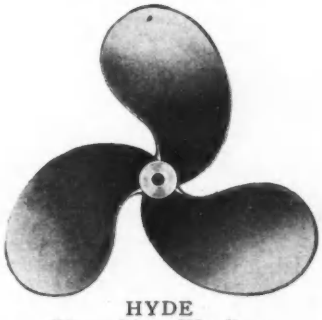
WEST PALM BEACH, FLA.
Palm Beach Mercantile Company

DETROIT, MICH.
Kermath Manufacturing Company
5880 Commonwealth Avenue

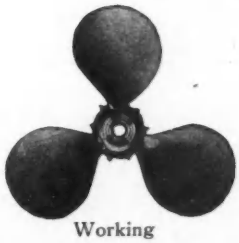
PORTLAND, ME.
Boyce & Rutledge Co.
7 Central Wharf
Charles F. Guptill Co.
175 Commercial Street

JONESPORT, ME.
William Frost

BOSTON, MASS.
Rapp-Huckins Company
59 Haverhill Street



HYDE
Three Blade Weedless



Working

Feathered

HYDE AUTOMATIC FEATHERING PROPELLER

ST. LOUIS, MO.
Webb Hardware Company
806 North Broadway
William Grossman
1630 Pine Street

CHICAGO, ILL.
W. L. Masters & Co.
800 North Clark Street

SEATTLE, WASH.
Pacific Marine Supply Co.
1223 Western Avenue
Atlas Engine Company
82 Marion Street

MILWAUKEE, WIS.
Joys Bros. Company
201 East Water Street

NEW ORLEANS, LA.
Stauffer, Eshelman & Co.
511 Canal Street
Woodward, Wight & Co.
Alker-Donovan Company
435 Camp Street

GALVESTON, TEX.
Wallace T. Taylor
2007 Strand

WILMINGTON, CALIF.
Fellows & Stewart

PORTLAND, ORE.
Oregon Marine Supply Co.
105 First Street
The Beebe Company
First and Washington Streets

SAN FRANCISCO, CALIF.
Johnson, Joseph & G. M. Josselyn & Co.
56 Sacramento Street

BALTIMORE, MD.
Mahon & Gall
Pratt and Gay Streets

CRISFIELD, MD.
Clarence Sterling & Son
1104 Main Street

NORFOLK, VA.
Gas Engine & Boat Corp.
First Street near Front

CHARLESTON, S. C.
Marine Supply & Engine Co.
149½ Meeting Street

SAVANNAH, GA.
White Hardware Company
25 Congress Street West

MIAMI, FLA.
Hopkins-Carter Company
Miami Ave. and S. E. 2nd St.

KEY WEST, FLA.
Thompson Fish Co.

TAMPA, FLA.
Knight & Wall Co.

PENSACOLA, FLA.
D. M. Witherill
713 South Palafox Street

MOBILE, ALA.
Marine Supply Company

MONTREAL, QUE.
A. Beliveau
663 St. James Street
John Leckie, Limited
714 Notre Dame Street West

TORONTO, ONT.
John Leckie, Ltd.
77 Wellington Street

VANCOUVER, B. C.
Hoffars, Limited
1790 Georgia Street West

CANADA
The Canadian Fairbanks-Morse Co., Ltd.
St. Johns, Ottawa, Calgary,
Winnipeg, Quebec

BRENTFORD, ENGLAND
George Spicer
Market Place

AUCKLAND, NEW ZEALAND
W. R. Twigg, Ltd.

Write for a copy of "Propeller Efficiency"

HYDE WINDLASS COMPANY

BATH, MAINE

The AC four-unit panel containing a complete set of AC instruments. Three-unit panel also available

AC

Precision instruments for motor boats

AC instruments for individual mounting

AC Tachometer tells what engine is doing in R. P. M's.

AC Thermo Gauge complete with 12-foot capillary tubing

AC Oil Pressure Gauge Comes in three ranges, 0 to 50, to 100 and 120 lbs.

AC Ammeter gives continuous check on rate of generator charge

THE new AC instrument panels, because of their unique beauty of design and finish, lend the final touch to motor boat appointments.

The four-unit panel contains AC Ammeter, AC Tachometer, AC Thermo Gauge and AC Oil Pressure Gauge. There is also a three-unit panel which gives you the AC Tachometer and the choice of two other instruments.

Mounted under a single glass, with indirect lighting, these instruments insure accurate control of your power plant.

AC instruments may also be purchased separately for dash mounting as shown in the individual illustration. All are beautifully finished, accurate and reliable.

Write today for descriptive bulletin and price list. In so doing, give us the name of your nearest dealer.

AC-SPHINX Birmingham *ENGLAND*

AC Spark Plug Company
FLINT, *Michigan*

AC-TITAN Clichy (Seine) *FRANCE*

AC INSTRUMENT PANELS AC TACHOMETERS AC THERMO GAUGES
AC AMMETERS AC OIL PRESSURE GAUGES
AC AIR PRESSURE GAUGES AC OIL FILTERS

© 1929, AC Spark Plug Co.

Sewed on Patches Are Good

(*Continued from page* 55)

and the breaking down of the laminations of the plywood.

The canvas patch (Fig. 3) its edges bound with ⅛ by one inch white oak strips, running lengthwise of the boat and tacked with gimp tacks on the forward and after edges, will interfere little with the boat's speed, if racing calls for the boat being back in commission in short order.

If the planking is badly broken, it will be well to back up the patch with a snug fitting wood patch similar to the butt block idea, particularly when the boat is to be used for racing. In fact, if the planking is only splintered, a butt block or several light battens reinforcing the break, the outside and inside surfaces given a generous application of hot pitch, will suffice to make a repair job that will tide over several days.

The time honored sheet copper patch will make a satisfactory repair job, but long thin escutcheon pins should be used in preference to gimp tacks. Ordinary copper tacks with their wedge shaped bodies, will have a tendency to split light planking.

In all patches it should be kept in mind that the forward end of the patch must be especially secure and the application of hot marine glue or pitch will avail little if that portion of the planking to which it is applied is wet.

A blow torch can be used to hasten the drying out of the planking, also a generous application of priming ether will help along the same lines.

J. E. M., Norwich, Conn.

SMALL LEAKS CAN BE STOPPED

AN outboard with a board out is a sorry spectacle unless its skipper is a particularly resourceful chap. Carrying scant tool equipment aboard and almost no spare parts, the average outboard with a broken plank any distance from the shore seems destined to pass out of the picture, as the business writers say.

But if the leak is not too large, one can try stuffing it with rags or cloth. A piece of engine wiping cloth, a flag or pennant, towel, large pocket handkerchief, a strip of canvas or duck cut from a life preserver, spray hood, or cover, or even a piece of one's shirt or underclothes can be used in a pinch. If there are several aboard, two or more can lean over the undamaged side as far as possible while the fellow with handy fingers and a good reach applies the cloth or rag to the crack. If it can be done from outside or underwater, so much the better.

If one decides on a wooden patch, it is possible to use a piece of oar or paddle, a section of seat, a block or cleat off the motor support brace, gunwales, or an intact piece of planking well above the waterline. Lacking a saw, a chisel, screwdriver, or good knife may serve for the hurried cutting. A leak on a plank high up on the sides may be treated with a reliable brand of plastic wood if it is possible to give it ten minutes or longer to set.

At times a metal patch may be best in the emergency. The lid off a 1-gallon or larger oil can, a gas tank cap, or a carburetor hot air flange may do for a small leak. If there are no nails around, cotterpins off the motor, brace, or shaft may do for temporary fastening; or any sizeable screws, cleats, or dowel pins. One boatman even chiselled off the top of his gas tank to stop a bad leak on a garboard strake split on a shallow, rocky bottom. This procedure should be condemned for the obvious fire risk. On some makes of outboard motors the rudder is easily removable, and it may serve as an adequate plug for a fair-sized leak. One may have to use an oar, bucket, or drag of some kind for emergency steering thereafter.

If there is considerable rope or heavy cord aboard, it may be rolled or knotted into a suitable plug, particularly for round or oval leaks.

If the plank break is well forward and the water calm, it is best to keep under way at a good clip while making the repairs. Automatic steering comes in handy then, while the planing tendency of a high-speed hull may halt the drawing around the break.

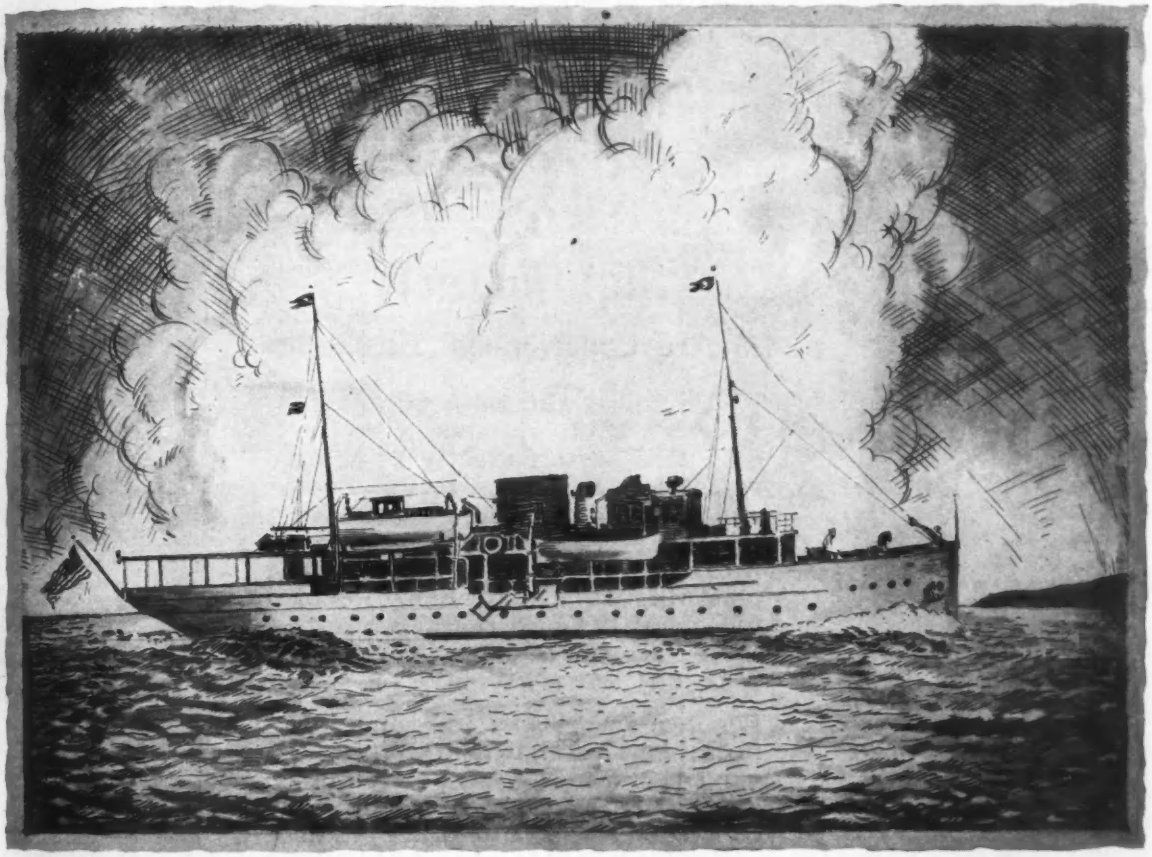
Calmness and quick decision on the emergency repairs possible are essential factors.

If one uses his outboard a good deal, he may do well to provide space aboard for a reasonable amount of tools and equipment to overcome such trouble. At least, a hammer, few nails, bolts, assorted washers, small chisel, sharp knife, square yard of canvas, and one can each of plastic wood and caulking cotton are worth the slight space they take up. If the boat is over 12 feet long, there should be room for a light sheet metal patch or strip of steamed hardwood planking of the same material as the hull.

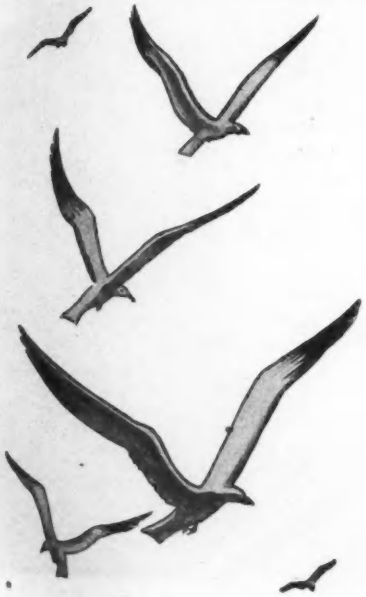
D. McC., Cleveland, O.

Advertising index will be found on 3rd last page

When Pleasure Lures You Seaward



The 115' yacht "Wanderer", designed by Henry J. Gielow, Inc., built by Lawley's and powered with two 180 H. P. eight-cylinder Bessemer diesel engines.



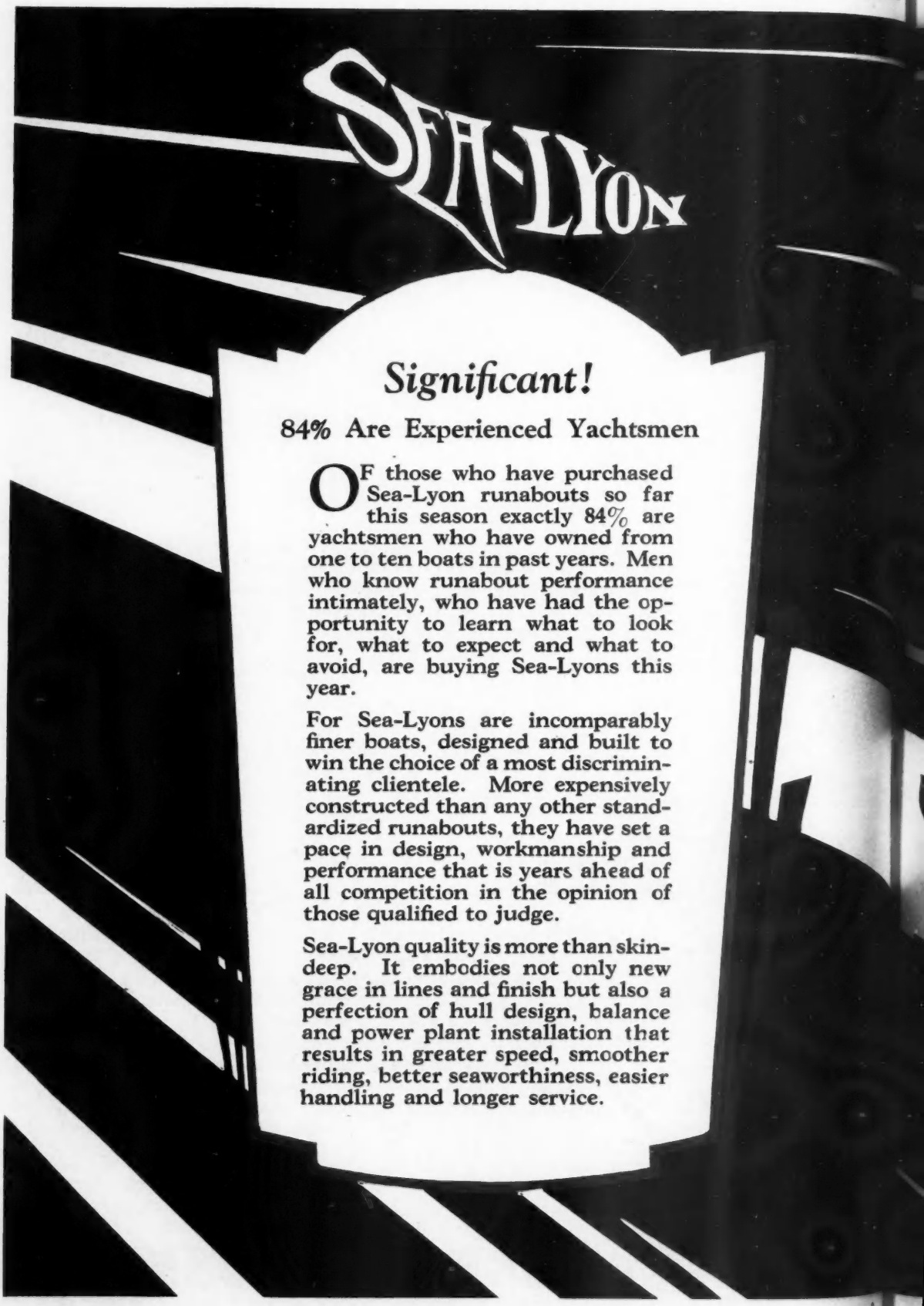
LOAFING along as the spirit moves you; speeding onward to distant ports; gliding smoothly through calm waters; or riding the crest of foam-capped waves —that's real pleasure and true comfort—when the power plant is a Bessemer.

When pleasure lures you seaward there is no substitute for the sturdy, smooth, quiet, vibrationless and care-free power of a Bessemer diesel engine. It is as quiet as the purring of the ship's cat, as smooth as a gull in flight and as dependable as the setting sun—an engine that makes every yachting moment a pleasure.

To make your yacht a pleasure craft in every sense of the word, power it with Bessemer diesels—*the engines that are making marine history.*

The COOPER-BESSEMER CORPORATION
Diesel Engine Division
23 Lincoln Avenue GROVE CITY, PA.
Special Yacht Representative, EARL H. CROFT, INC.
25 West 43rd St., New York, N. Y.

BESSEMER
MARINE DIESEL ENGINES



Significant!

84% Are Experienced Yachtsmen

OF those who have purchased Sea-Lyon runabouts so far this season exactly 84% are yachtsmen who have owned from one to ten boats in past years. Men who know runabout performance intimately, who have had the opportunity to learn what to look for, what to expect and what to avoid, are buying Sea-Lyons this year.

For Sea-Lyons are incomparably finer boats, designed and built to win the choice of a most discriminating clientele. More expensively constructed than any other standardized runabouts, they have set a pace in design, workmanship and performance that is years ahead of all competition in the opinion of those qualified to judge.

Sea-Lyon quality is more than skin-deep. It embodies not only new grace in lines and finish but also a perfection of hull design, balance and power plant installation that results in greater speed, smoother riding, better seaworthiness, easier handling and longer service.

Advertising index will be found on 3rd last page

Immediate Deliveries

FOR eastern buyers the location of our plant in New York City is a distinct advantage for prompt delivery, and for competent service throughout the life of the boat. An able organization that takes a personal interest in the performance of every Sea-Lyon insures the continued satisfaction which every buyer is entitled to receive.

Sea-Lyon prices are quoted f.o.b. or in the water at New York. The saving of freight and delivery charges enables them to compete with cheaper boats shipped from distant factories.

Sea-Lyon 35	$2,975	Sea-Lyon 45	$5,850
Sea-Lyon 40	4,650	Sea-Lyon 60	12,500
Sea-Lyon 40 Sedan	5,450	Sea-Lyon 65	30,000
Sea-Lyon Commuter			$25,000-$26,000

Prices quoted f.o.b. New York

Telephone today for an appointment and let us give you a ride in a Sea-Lyon that will prove its remarkable performance qualities, seaworthiness and riding comfort.

HOWARD W. LYON
INCORPORATED

HOTEL BARCLAY
532 Lexington Avenue
(at 49th Street)

NEW YORK

Telephone: Vanderbilt 4445-4446

Plant and Service Station
City Island 1645-1646

HARDLY a day passes without news of fresh triumphs won on the water with Robert Bosch Pyro-Action Spark Plugs. But why should you care? You may not race. You may use your boat as most motorists use their car—for leisure, not for speed.

Even so you should care, because the same advantages that have made Pyro-Action Spark Plugs pre-eminently favored among racing enthusiasts, have earned a preference for Pyro-Action Plugs in the engines of all kinds of pleasure boats large and small. The knife edged firing points which give a broader, hotter spark. The precision workmanship... which your eye can see. The stout quality of the materials... the insulator that won't crack ...the electrodes that don't burn off readily. And then, too, the fact that these plugs are made by Robert Bosch, inventor of the famous Bosch Magneto.

Pyro-Action Spark Plugs are the highest priced popular plugs you can buy. But what are a few cents extra compared with the fresh power they give your engine... the utter confidence and security they give to you? Write for free booklet, or ask your marine supply dealer about Pyro-Action Spark Plugs.

ROBERT BOSCH MAGNETO CO., Inc.
3603C Queens Blvd., Long Island City, N. Y.

The Original Bosch
ROBERT BOSCH PRODUCTS

Only Robert Bosch Pyro-Action Plugs are Original-Bosch Plugs. For your protection look for full name "Robert Bosch" and this trademark

The Tools to Carry

(*Continued from page 53*)

Particularly useful aboard a boat are a long and a short screw driver. These with pliers will be used more often than any other tool.

In addition to the tools illustrated it is advantageous to have a hack saw and extra blades, a cold chisel, a small vise, a hand drill and drill assortment and a set of socket wrenches. Rat tail, flat and three cornered files will complete the secondary equipment, which will find use in repairing breaks, rather than in tightening and adjusting, which the tools on the shelf will be called on to do most often. These latter tools, if they must be kept in a locker, should be wrapped in a piece of canvas which has been given a coat of paint oil, or treated with any of the many water proofing liquids now on the market.

In addition to caring for them in this way, if they are treated to a light coating of oil, they will keep in perfect condition, for a season at least.

There is little need to carry a large assortment of tools. Simply check up on the tools which will be needed to take care of ordinary adjustments and buy the best possible brand to meet the requirements.

By reason of the alternating coolness and dampness to which the motor of a boat is subjected, nuts, pipe unions, etc., have a habit of sticking and sticking hard. First class tools will be more apt to meet the situation satisfactorily.

J. E. M., Norwich, Conn.

AN OUTFIT FOR THE BOAT

THE size of a tool outfit depends upon the size of the boat and engine and other equipment, also on the locality, (distance from points of supply) and also upon the person who is to use the tools. Some people can make emergency repairs, after a fashion, with little or no tool equipment and could not do better if a complete outfit were on board. At the other extreme, some people cannot do a job unles they have exactly the right tools for every little things. Most boatmen come between these extremes and like to have enough tools abroad to do ordinary repairs and to do the small jobs that occur to them while out on a trip. This is one of their chief sources of pleasure, it seems. The list given below will satisfy this class, and when special jobs are planned, the extra tools can be brought from the home tool box temporarily.

LIST OF TOOLS

Pipe wrenches, 10 and 24 inches.
Nut wrenches, complete set of socket wrenches or straight handle, bent wrenches will be found satisfactory.
Monkey or other type adjustable wrench.
Special tools that come with engine, reverse gear, magneto, etc.
Slip joint and electricians pliers.
Files, round, half-round, triangular and contact point size.
Screw drivers, for small, medium and large screws, preferably with long hanks which give better grip.
Cold chisels and wood chisels, sizes ½ and 1½ inches.
24-inch steel wrecking bar or crowbar. The wrecking bar is very handy.
Putty knife, heavy jack knife and shears (snips).
Caulking iron, soldering iron, solder and paste for same.
Hack saw frame and assorted blades.
Wood saw, about 18-inch cross cut, zig-zag rule, small square.
Hatchet or Boy Scout axe, with cover for edge.
Claw hammer, tack hammer and perhaps a ball pein hammer if available.
Small strong vise that can be attached to a shelf, or a large hand vise.
Cabinet makers steel C clamp, about 6 inches.
Ratchet brace with carpenters bits at least sizes ½ and 1-inch.
Square shank metal drills, sizes 1/16 to ⅜-inch.
Screw driver and countersink bits for brace.
Center punch, nail set, awl, calipers.
Adjustable block plane and sharpening stone.
Chunk of steel for anvil, about 6 inches square by 2 inches thick.

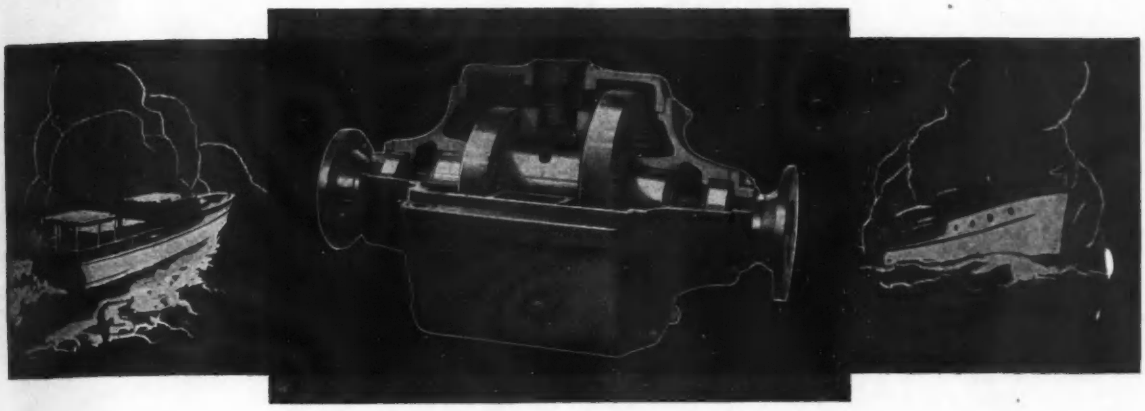
MISCELLANEOUS MATERIAL

Assortment of nails, screws, bolts, nuts, washers, screw-eyes, split pins, etc.
Several sizes of bare wire, insulated wire, insulating tape.
Sand paper, emery cloth, caulking cotton.
Small pieces of sheet metal, rubber, canvas, asbestos.
Small cans or bottles of shellac, glue, putty, white lead, grinding compound, rust-breaking oil.

(*Continued on page 98*)

Advertising index will be found on 3rd last page

How to Make a GOOD BOAT BETTER



A Morse Straight Line Reduction Gear installed in your boat will cut your operating costs, and increase your speed. Designed by engineers of nation-wide reputation, these gears have won the favor of the leading marine architects and boat builders everywhere. Their performance with any type of power, under any conditions, has set new standards in boating, for it is proven that Morse Straight Line Reduction Gears *do* make good boats better.

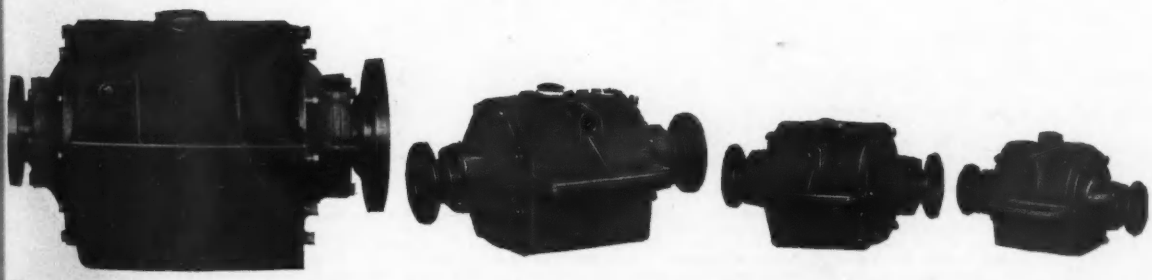
In yacht, cruiser, or work boat, Morse Straight Line Reduction Gears will do these things for you: They cut operating and maintenance costs, with increased speed, towing capacity, and maneuvering ability. They give increased useful space in your boat by doing away with bulky, over-powered motors. They transfer engine power to the propellers at the speed that means most efficient performance—and do it quietly. Boat builders will tell you that they have solved more propeller problems than any reduction gear hitherto manufactured, and there is a complete range of sizes for all types of boats.

Your boat should have Morse Straight Line Reduction Gears for more boating pleasure, and finest performance. Write us today for complete specifications and data.

MORSE
STRAIGHT-LINE
REDUCTION GEARS
MORSE PRECISION PRODUCT

MORSE CHAIN COMPANY

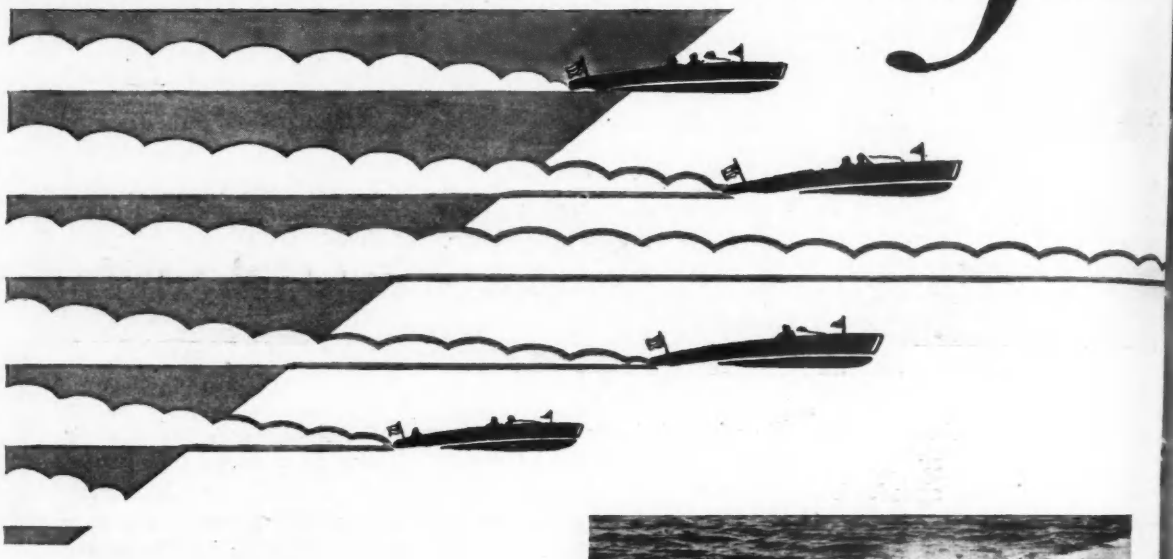
DETROIT, MICHIGAN



The Only Manufacturers of a Complete Line of Reduction Gears

Advertising index will be found on 3rd last page

Hackercraft



Another 26-foot Hackercraft, owned by Wooster Lambert, which won against the entire field of entries at Palm Beach, February 22nd. Speed 41.3 m. p. h. average. Red Bank, N. J., May 30th, was the scene of another Hackercraft victory against a field of similar and higher powered runabouts

All Hackercraft models are supplied at additional cost with the special De Luxe sedan top, designed by John Hacker, N. A. Hackercraft are built in 24, 26, 29 and 30-foot sizes

Another stirring testimonial on the speed supremacy of Hackercraft is flashed to America from Germany. A 26-foot stock Hackercraft model —Kermath "200" powered—piloted by its owner, Herr Richard Busse, succeeds in beating everything in its class at the International Boat Races held on the Templiner See, Potsdam—wins the International Runabout Championship of Europe! Hackercraft sets the 1929 pace by a sweeping series of stock racing triumphs. These Hackercraft victories simply reaffirm the outstanding superiorities of performance and speed that have been designed and built into "America's Finest Runabouts" by John Hacker, N. A. Four genuine Honduras mahogany models priced from $3150 to $5750 offer an excellent choice. The Hackercraft catalog will be mailed to you on request.

On Display **New York, 5th Avenue at 15th Street; Boston, 1043 Commonwealth Avenue; Philadelphia, 102 South 4th Street; San Francisco, Rialto Building; Detroit, 500 E. Jefferson Avenue; Bay Shore, Long Island, 224 E. Main Street; Wilmington, Calif., 161 Anacapa Street; Buffalo, 301 Jackson Building; Clayton, New York; Grand Rapids, 307 Kelsey Building; Galveston, Texas, 208 23rd Street; Walloon Lake, Oden, Michigan; Port Washington, L. I., 262 Fair Street; Kingston; Baton Rouge, La.; Lakeport, New Hampshire.**

HACKER BOAT COMPANY

530 RIVER DRIVE **MT. CLEMENS, MICHIGAN**

Advertising index will be found on 3rd last page

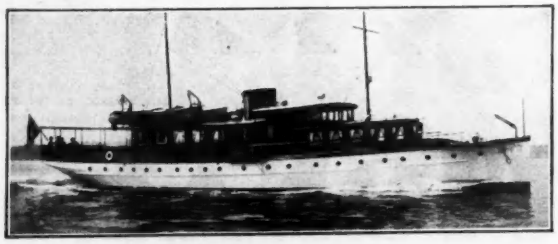
Wins ...

INTERNATIONAL Runabout Championship of Europe!

Herr Richard Busse at the wheel of his 26-foot Hackercraft BUZZARD III, which he drove to victory in the International Runabout Races at Potsdam, Germany, June 9th, 1929

HACKERCRAFT

AMERICA'S FINEST RUNABOUTS



NIRVANA IV

Length 100'. Beam 18'. Draft 5' 6". Powered with two Diesel Motors. Speed 14½ m. p. h.

1 Double Stateroom. 4 Single Staterooms, each with hot and cold running water. 2 Bathrooms.

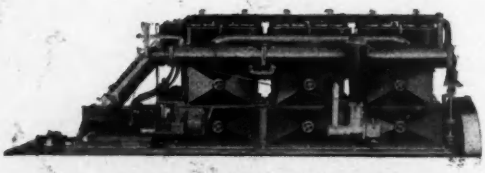
Crew Quarters in forecastle, berthing 4 men, with complete lavatory and shower. 2 Staterooms forward to accommodate cook, steward and engineer. Complete galley with dumbwaiter.

Large quarterdeck. Continuous deck house containing large living Saloon, Lounge and Lavatory, Dining Saloon and Service Pantry.

Enclosed bridge deck with chart house and Captain's Stateroom.

Write for complete details and interior views.

The above Yacht, as well as all Yachts built in our shipyards, are complete down to the smallest detail, and are furnished and equipped at prices absolutely unequaled if construction and finish are considered. Every boat we make is distinguished by a quality of craftsmanship that has set a standard for marine engineering in this country.



20th Century Marine Motors

We manufacture the famous 20th Century Marine Motor and it is used in all our standardized boats. Two models: 4 and 6-cylinder, 60 and 100 h.p. Right and left hand.

The NEW YORK
YACHT, LAUNCH & ENGINE CO.
Morris Heights, New York City

An Outfit for the Boat

(*Continued from page* 94)

These miscellaneous materials can be stowed away in any out of the way corner of the cabin, not in the bilge where they may get wet, and if kept together will be very useful.

The tools can be placed in a special built-in cabinet but as time goes on, inevitably more and more tools will be added to the original outfit for which the cabinet was built, necessitating alterations to accommodate them. In some localities it is not safe to leave such equipment in the boat, therefore the writer prefers to keep the tools in a fiber suit case that can be stowed in a locker when on board and when leaving the boat it can be put in the Club locker or elsewhere in a safer place. This method keeps the tools together and the entire outfit can be moved to whatever part of the boat one is working, and at the same time it is large enough to allow for expansion of outfit.

The suit case can be provided with metal partitions very easily, to keep the various groups of tools separate. One point to remember is to keep the sharp edged tools where the edges will not come in contact with other tools and get dulled or nicked. Buy good tools for the important members of the outfit, for a hardware store is not around the corner from your boat when an accident happens and replacements are needed.

L. R. K., Philadelphia, Pa.

Commodore Harry B. Greening of Hamilton, Ontario and Miss Carstairs of London. Miss Carstairs has again challenged for the Harmsworth Trophy and will race her boat against Gar Wood's Miss America VIII at the Harmsworth Trophy race at Detroit on Labor Day

KING KNIGHTS MAJOR SEGRAVE

Becomes Sir Henry in Ceremony at Bognor

(Copyright, 1929, New York Tribune, Inc.)

Major Henry O'Neil Dehane Segrave became Sir Henry Segrave when King George, at Craigwell House, Bognor, bestowed on him the accolade of knighthood in reward for his automobile and motorboat speed feats in the United States in an age-old ceremony that has changed but little since the institution of chivlary.

Major Segrave, wearing a business suit, was received by the King's equerry, Sir Bryan Godfrey-Faussett, who conducted him to the monarch, who was waiting in a ground floor room wearing morning dress.

The ceremony was simple. The major, introduced by the equerry, knelt before the King and received a tap on the shoulder from the blade of a sword in the King's hand. His Majesty said, "Arise, Sir Henry," and the ceremony was complete.

Afterward Sir Henry talked with the King and Queen of his record breaking runs in America with his racing boat, Miss England, and automobile Golden Arrow. The interview lasted nearly an hour, after which the new knight had luncheon with the Queen while the King returned to his own sunroom to partake of luncheon. Sir Henry was the first person knighted by the King since his illness began.

So great were the crowds waiting to meet the speed king, who arrived in Bognor in a coupe, that on reaching the crossroads at Aldwick, instead of taking the drive leading to the main entrance, he dodged the throng by taking the private roadway leading to the servants' quarters, entering Craigwell House by the garage gate and the tradesmen's entrance.

Advertising index will be found on 3rd last page

GOLDEN DAYS AND SILVER WATERS

FROM the hottest days of midsummer, this man escapes at will—his sweltering office, his land-locked home are left behind. He is off on the cool, flashing sea to a vacation in Maine!

Quiet, peace, serenity are his . . . long, lazy hours fly by in a splendid procession . . . they show him the changing coastline of a hundred ports and beaches. A salt wind freshens . . . the white foam churns beneath his cruiser . . . his pleasure is as deep as the ocean, as timeless as a primitive world before time began!

For every day on the water is a fresh adventure—whether you go for an extended vacation, a week-end at Marblehead or simply to cruise . . . to fish . . . to drift.

It is true that few men can own such a servant as the boat we speak of. But the man who does, knows summer at its best. He can use his boat to commute to his offices, away from the clatter and dust of trains and motor cars. In his leisure hours he finds in it a thrill and a diversion, not only for himself but for his friends.

And whether he moves so slowly as to scarcely stir a ripple or speeds over the Sound at thirty-five to forty miles an hour —his boat will give him unfailing performance, because its engine is a Wright Typhoon.

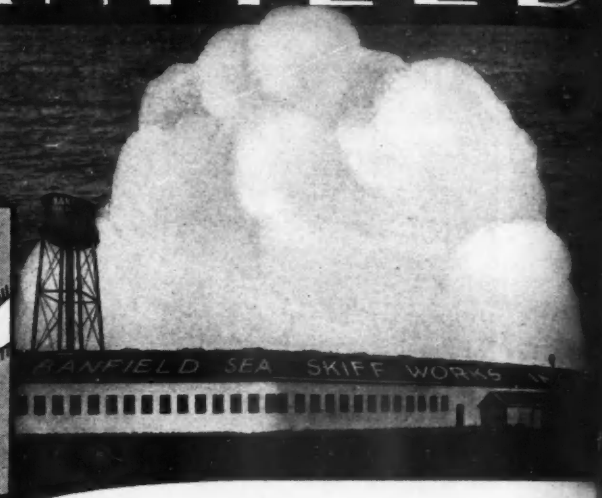
WRIGHT TYPHOON

Address inquiries to Marine Engine Division

WRIGHT AERONAUTICAL CORPORATION

Paterson, New Jersey

The Gold and BANFIELD



During your attendance at the Gold Cup Regatta, Red Bank, N. J., August 24th and 25th, make it a point to visit the Banfield plant at Atlantic Highlands and see the world-famous Banfield cruisers under construction. This modern boat-building plant, covering several acres, is equipped with the latest type of labor-saving machinery and is manned by artisans who have many years of boat-building experience.

Atlantic Highlands, just west of the mouth of the Shrewsbury River, is twenty minutes from Red Bank by automobile and one hour and thirty minutes from New York by Jersey Central Railroad or express steamship lines. Automobile highways from the metropolis lead direct to the plant.

Advertising index will be found on 3rd last page

d Cup Regatta
CRUISERS

JUST as sportsmen spend hundreds of thousands of dollars competing for the Gold Cup, we have expended large sums of money in development and research to make the Banfield "32" not only a boat of great speed but one in which absolute safety and seaworthiness are unquestioned. A craft in which you can venture far and swiftly in absolute comfort and safety with complete accommodations for four persons on extended cruises.

Immediate Delivery

Only a limited number of Banfield "32's" are available for immediate delivery. If you want to enjoy the utmost in boating pleasure this summer we urge you to purchase your Banfield "32" now. Delivery will be made within two or three days after receipt of order.

Materials and equipment used in the Banfield "32" are the finest obtainable. Monel metal shafting, Goodrich Cutless bearings, inside stuffing box, Lux fire protection system, accurate compass in electrically lighted binnacle, tachometer, powerful searchlight, barometer and clock are standard at no additional cost. There are no further improvements for the owner to make or buy.

POWERED WITH 200 H. P. KERMATH
SPEED 28-30 M.P.H. $7,950.00

Literature on Request
Deferred Payment Plan if Desired

POWERED WITH 100 H. P. KERMATH
SPEED 18-20 M.P.H. $7,150.00

BANFIELD SEA SKIFF WORKS INC.

SALES OFFICES AND PERMANENT EXHIBIT
277 Park Ave. Bldg. - ENTRANCE 502 LEXINGTON AVE. - New York City

PLANT:
ATLANTIC HIGHLANDS, NEW JERSEY

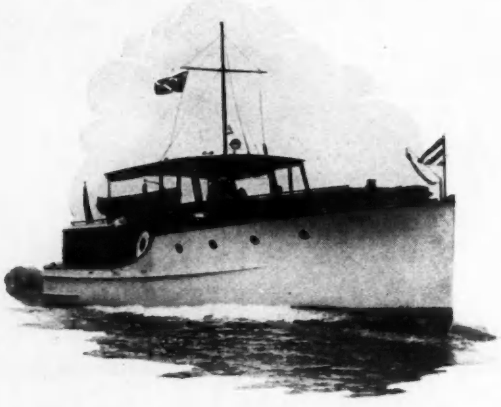
LARGEST BUILDERS OF
SEA SKIFFS IN THE WORLD

This is the Diesel Age

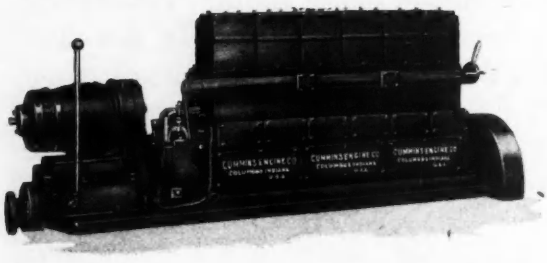
and

CUMMINS

Is the Accepted Standard for Motor Cruisers



ALBATROSS, a 38'9" cruiser designed and built by Frederic P. Humphreys, Inc. Powered with a 60 H.P. Model U Cummins Diesel, it has a speed of 12 M.P.H.



THE great economy in fuel and the absolute banishment of the fire hazard are recognized characteristics of Diesel power. But all Diesel engines are not identical in design, quality and workmanship, neither are all Diesels suitable for motor boats. You must use the same choice of judgment in selecting a Diesel engine as you would in anything else. Mechanically, the Cummins Diesel engine is superior to all others for pleasure craft up to 75 feet in length. The Cummins is not a converted industrial Diesel but a power plant designed particularly for marine service with a power range up to 235 H.P.—one to eight cylinders. Write today and let us tell you in detail why the Cummins is the better Diesel.

BUY A CUMMINS DIESEL CRUISER

"The Fuel is Prepared"

CUMMINS ENGINE CO., Inc.

Columbus, Indiana

New York Office:
French Bldg., Fifth Ave. at 45th St.
Telephone: Murray Hill 6065

Huck Says They Mutinies

(*Continued from page* 25)

that when I was going down the ladder to Pilgrim, I misses the last rung and goes down in six fathoms. I must have et too much and got a little dizzy.

In the meantime, Ariel had recovered her missing Big Ben and they starts off about 3 P.M. at 25 m.p.h. to catch us. Night falls and it falls hard, Chap. They has one of them local pilots on board. You know, the kind of a feller what knows every reef on the coast because he has been on them all. Well, he sticks them over a oyster bar at full speed.. All the crew jumps overboard and tries to carry her back into deep water; in fact, Chap, no matter where the place or what the events, every time Ariel stops, the crew, they always jumps overboard. I am told that one of them, he gets under the transom, lifts and shouts, "Give her the gun." The feller at the wheel opens both motors up to 2000 r.p.m. and jabs in the clutches. The feller under the transom is shot half a mile astern, out into deep water. When they stops the motors, they hears him yelling, "Help! Help! I cannot see you. I am in deep water. Help!" As nobody does nothing to save him, he finally swims back. Before they gets thru dredging they wraps up both propellers. They runs to Brunswick, hauls out for new wheels, taxi over to Sea Island, joins the whoopee and thinks it is a great joke. It worries me, Chap.

Sunday morning I shoots the gun at 7 a.m. and signals for a start in thirty minutes. Nobody appears on deck but Don Fattarze. He walks over to me ugly-like and says, "You little shrimp, what is the idee of making such a helluva noise when we all needs sleep?" I starts to explain that we was supposed to start for Savannah but he comes down the ladder saying as how they likes it at Sea Island and proposes to stay there several days, and as Don Fattarze weighs 275 lbs. stripped, Chap, and as I doesn't like the ways he looks at me, Chap, I just says yes, and that is how the mutiny starts, Chap, and after that the schedule, it goes up the creek, it does.

That morning they bowls on the bowling green. I often hears of bowling greens. I thinks they is one in New York, isn't they, Chap? But I never sees one before. I doesn't know just what the point is, but anyways, Fattarze, he insists on making some kind of a bet with me and after awhile he collects ten dollars from me, which I suppose it is all right.

That night about thirty-five people they invites themselves on the flagship. I explains that the Fairform Flyer is only intended to accommodate about twenty, but they pushes me aside and comes aboard and wedges around various places. They serves a quantity of lemonade. Pete, Hawaiian leader of the Cloister Orchestra, he comes aboard with his steel guitar and he sings in a lilting voice what was so melodious that I almost succeeds in negotiating a thousand dollar loan with Don Fattarze, but not quite. I drinks a good deal of lemonade and things is not quite clear after that, but I thinks that after a couple of days more I succeeds in getting six boats under way.

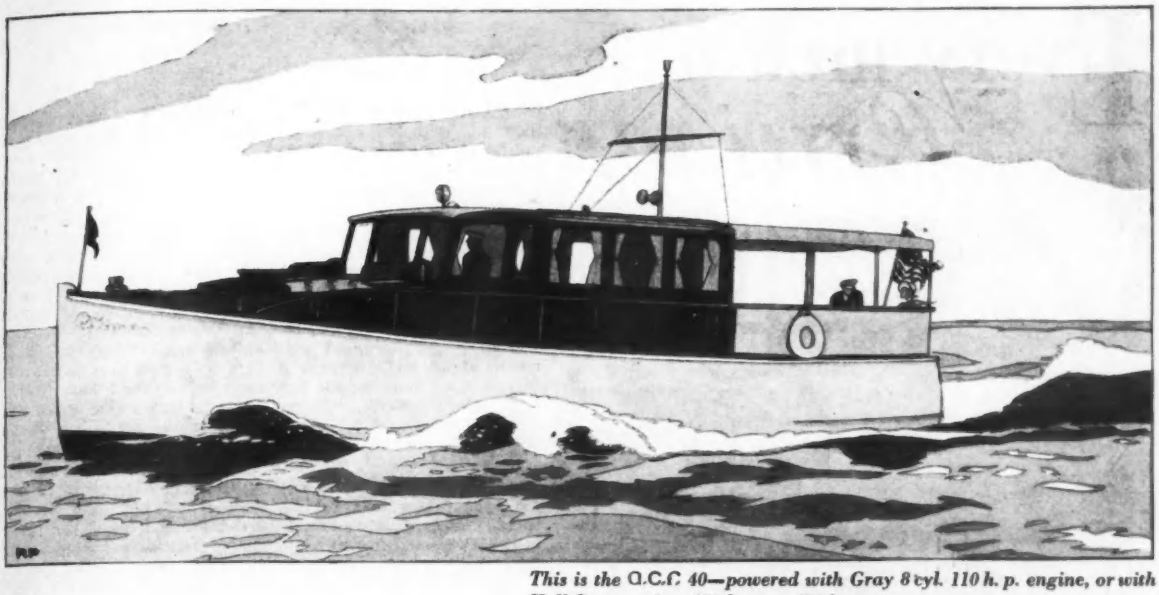
The next most important thing what happens was seven miles at sea, bound for Charleston. Ariel, it stops. It had just occurred to them that maybe they better put some oil in the motor. So they all jumps overboard. Earl Wilson tears up to the flagship in Starjack and says as how he sighted two sharks a little ways back. By that time Ariel was again under way. When interviewed at Charleston concerning bathing among sharks, Avery Wright, he says, "What is a few sharks among friends, and anyways, we has a man out aft with a boat hook to stab them."

A couple of more ocean runs and we was at Southport, where Mayor Yaskell and Captain Willis of the Coast Guard greets us. That night the crew of Ariel, they gives a old fashioned Barbecue on the Beach to the Mayor, the Captain and the crew, composed of smoked deer. I doesn't know, Chap, where they catches the deer. Whether they catches it at sea or ashore, I doesn't know. All I know is that we spends most of the evening trying to gnaw deer meat what has only been just slightly warmed by the fire. The barbecue was finally broke up by the crew of Ariel going in swimming with their clothes on and trying to drag everyone else in with them, which I thinks was very bad, doesn't you, Chap? Mrs. Earl M. Wilson narrowly escaped spoiling a Paris creation that she had had made for the occasion.

In the morning Captain Willis takes us out through Pancake Inlet, a place where the chart shows no water and what cuts out Cape Fear and Frying Pan Shoals and saves ten miles, but I doesn't advise nobody to try to get in that ways as they is several unmarked hairpin turns. We makes the usually dreaded run across to Beaufort Inlet in no time, gasses up at Morehead

(*Continued on page* 104)

Advertising index will be found on 3rd last page



This is the Q.C.f. 40—powered with Gray 8 cyl. 110 h. p. engine, or with Hall-Scott engine, 100 h. p. or 175 h. p.

The Q.C.f. 40'—as well as the 30', 47', 54', and 68' cruisers, and the 27' cruiser-runabout—may be purchased on a plan which allows you to pay as you use it.

. . . forty feet of compact perfection

When the Q.C.f. 40 foot cruiser was planned, Q.C.f. asked numberless seasoned yachtsmen to specify the *ideal* 40 foot cruiser . . . then focused the vast Q.C.f. resources on the production of that ideal.

She is a beautiful boat, this Q.C.f. 40 . . . staunch and seaworthy. You may trust her with your life and everything you have! Fool-proof security is built into every inch by the craftsmen of the great company which stands back of her.

She has real cabin berths for six . . . a roomy, sunny deck, sporting six big easy chairs . . . a plate-glass enclosed bridge deck. She has a commodious galley and comfortable crew's quarters. She is equipped for every cruising need . . . even to linen and china. Choose either Hall-Scott or Gray for your power, and you can almost forget that she *has* an engine. If you want your "40" particularly for day cruising, we'll take out her after cabin, to give you a great deal more cockpit room.

See the Q.C.f. "40" at any of the convenient Q.C.f. showrooms . . . browse around her comfortable cabins as long as you choose . . . examine her sure and simple one-man control. You'll certainly agree with every Q.C.f. "40" owner . . . she is 40 superb feet of compact perfection.

Q.C.f.

Q.C.f. NEW YORK MARINE SALON

217 West 57th St., bet. 7th Ave. and Broadway

AMERICAN CAR AND FOUNDRY COMPANY

See the Q.C.f. fleet for yourself at any of these showrooms—or write for detailed descriptions and prices: New York—Q.C.f. Marine Salon, 217 West 57th Street. Other showrooms at: Boston—Noyes Marine Sales Co., 1037 Commonwealth Avenue . . . Detroit—Q.C.f. Salon, 500 E. Jefferson Avenue . . . Cleveland—The Yacht Sales & Service, Inc., 18123 Detroit Avenue . . . San Francisco—S. C. Kyle, 427 Rialto Building . . . Chicago—Ward A. Robinson, 8 So. Michigan Avenue . . . Wilmington, Del.—American Car and Foundry Company.

Every inch a Cruiser

DACHEL CARTER Twin 45 Screw

IMMEDIATE DELIVERY
Ready for Cruising

THE Dachel-Carter "45" has a beam of 11 feet 4 inches, affording large deck space, roomy cabin interiors and extra stability in a sea. It is of the one man control type—has space for a paid hand when desired—large stateroom aft with two spacious lower berths—a forward cabin to accommodate four—a completely outfitted galley—two toilets—with commodious lockers and drawers. But note the extreme completeness—the fine detail coupled with a carefully supervised workmanship and the use of selected materials which make these custom built boats to standardized design an outstanding value for the yachtsman who is attracted to genuine quality. *Write today for further particulars.*

We Invite a Personal Inspection at Our Plant

DACHEL-CARTER BOAT CO. Inc.
BENTON HARBOR MICHIGAN
Builders of the
WATERWITCH 16 Foot Outboard Runabout

Huck Says They Mutinies

(*Continued from page* 102)

City, continues through to Pamlico Sound and anchors for the night in South River, a quaint and quiet place. At least, it was until Don Fattarze starts yelling to Tescildot a half mile aways to know does they have any ginger ale left. Then all the natives for miles around, they congregates on the shore to see what has happened.

The next day we runs nigh onto 180 miles to Norfolk. The veteran Minim, what has already run from Jacksonville to Bar Harbor and back, and is on her second trip, she has a electric fuel pump go bad and the fleet it is delayed down to 12 m.p.h. long enough so that we gets into Norfolk after 8 P.M. At this juncture, I elects to go to bed, but Henry Baldwin, he says, no, I is going over to Old Point Comfort to meet a feller he wants me to know, and hurry as they is only just time to catch the ferry. They tells me the ferry was only a short ways from the boat. So I hurries. We gets into a taxi. We drives seven miles in ten minutes. I doesn't mind the sea, Chap, but my gawd, these taxies!

When we gets to the ferry dock, they wasn't no ferry. It seems the last ferry ran two hours before. That, Chap, it suits me fine. "Now let's go back to the boat and have something to eat," says I. It was then ten thirty and I hasn't had nothing to eat but a sandwich at noon, Chap. You knows. But Baldwin, he is one of them birds what starts out to do a thing and does it regardless of life, liberty or largesse. He starts a house-to-house search for a ferry boat. He was gone for a hour. I hires the taxicab to stand perfectly still so I could sleep. Henry finally comes back with a ocean towboat. I understand he bought it for $200 and got a quitclaim deed to it. We arrives at the Vanderbilt Chamberlain at 11:55 P.M. His friend had left for Siberia or somewheres. I was glad of that. But the cooks had all gone home. I was not glad of that, Chap. Just as the dance was over, they serves us cheese and club sandwiches. You has no idee, Chap, how I detests cheese and club sandwiches.

On the ways back, I was that dead, I reclines on a couch in the towboat and falls fast asleep immediately. Somebody notes I was getting a little rest after standing up for seven hundred miles and they yells down the companionway, "Ariel's aground, Huck!" Chap, I jumps up through that hatch so quick that I cracks my head a awful smash. I still has a egg to show for it and if I acts a little more peculiar-like than usual, you knows the reasons.

On the ways up Chesapeake Bay the flagship, she sights the same mammoth floating pile what we hits last year. We turns out, signals the next boat. Each boat done that until they gets to Ariel, last boat in line. Now it seems, Chap, that on Ariel, they was all down below playing bridge except the man at the wheel and the man at the wheel, he was reading a magazine and had one foot up on the control stand. Once in a while he looks ahead to see if they is still with the fleet. He doesn't see no signals, nor does he see the log. But they all notices it when it gets in between the propellers. They puts on another pair at the next port.

At the Naval Academy at Annapolis a welcome had been arranged through Yachtsman Adams, secretary of the Navy. The welcome was a warm one. We were given good berths for the yachts and escorted hither and yon.

Our runs up the Chesapeake, through the Chesapeake and Delaware Canal, up the Delaware past Philadelphia and through the Delaware and Raritan Canal were fast and uneventful. In all the open water, the fleet, it averages twenty miles an hour without losing a single man overboard from Ariel.

As we reaches Cur De Lyon's boat yard at City Island, New York, Don Fattarze he yells out to all hands that he knows of a elegant speakeasy and he wants all survivors to dine with him that night. Everybody accepted. That night we meets at the appointed place and proceeds. Don leads the way up to the door. They opens a grille. He says as who he was. They says something. He again explains who he was. They conducts this here conversation for some time. Fattarze seems to be making no gains. As we drives off down the street I looks back and Don Fattarze was still trying to make out he was not a prohibition enforcer.

That is the last that has ever been seen of him. A week, it has passed. Nobody has heard from him. Kenneth Hunter, his shipmate, has been walking up and down every street in New York looking for him. May I ask, Chap, through your columns, if anybody sees or hears of Don Fattarze will they kindly report direct to the Jacksonville police.

BOHNALITE

62% Lighter than Iron

Production managers, factory managers, general managers, will find in Bohnalite the key to the solution of the problem of keeping weight in their product at the absolute minimum.

For Bohnalite is a new alloy 62% lighter than iron and rapidly taking the place of iron in many lines of manufacture.

Possessing every valuable property of iron, Bohnalite has many superiorities of its own, including high uniform hardness—great density—fine grained structure—tremendous strength—excellent bearing qualities—ductility and lightness.

We would like to go into detail with your engineers on the marked advantages of Bohnalite.

Send us your blue prints and samples and let us show you how Bohnalite will increase the efficiency of your product. Ask for the new Bohnalite booklet.

BOHN ALUMINUM & BRASS CORP., DETROIT, MICH.
New York Chicago Philadelphia Cleveland Pittsburgh

It's the Gas you **BURN**
that gives you Power

TO burn all the gas that comes into the cylinders you must have a long, smooth spark. That means a wide gap in your spark plugs.

But to start your engine a short, heavy spark is best. And that means a narrow gap in your spark plugs.

No compromise plug will meet your needs. No fixed gap plug will give you utmost power, and yet permit easy starting.

MotoMeter Self-Adjusting Spark Plugs do both. And they are especially good on outboard motors.

Two sizes; metric and 7/8 inch thread. One price; $1.00. If your dealer does not carry them, write us direct.

N.B. Dealer's profit-making proposition very attractive. Write or wire.

THE MOTOMETER COMPANY, INC.
5 Wilbur Ave., Long Island City, N. Y.
The MotoMeter Co. of Canada, Ltd.
Hamilton, Ont.

MOTOMETER
SELF-ADJUSTING
SPARK PLUG

Al Loomis' Cutter Hotspur

(*Continued from page 29*)

Hotspur will forereach under her staysail alone, while in breezes up to 40 miles an hour she has already proved that she handles comfortably under her jib with a deep reef rolled in her mainsail.

The cutter is planked with mahogany and fastened with bronze screws, and her joiner work both on deck and below is the finest imaginable. Because the tall hollow mast is stepped through the cabin house, the house as well as the boat's sides is strapped with brass. To improve cruising comfort, the deck openings have been restricted to two—a fore hatch in the cabin house, and the sliding hatch aft. Deadlights instead of portlights provide illumination for the cabin, and the deck is canvas-covered for better tightness.

The interior arrangement has been worked out with several novel features, including two sail bins under the fore deck. These, roomy enough to accommodate all of the cutter's light weather and storm sails, as well as handy billies and spare line, are illuminated by deadeyes in the deck, and by an electric dome light. Next aft comes the toilet, located just to port of the mast, and separated from the main cabin by a plywood bulkhead. In this forward compartment also are a hanging locker, drawer space, linen closet, and the built-in ice chest.

A curtained opening on the starboard side communicates with the cabin in which are two transoms with hanging pipe berths which drop back against the boat's sides. The transom and berth on the port side are 6 feet 3 inches long; those to starboard being three inches longer. Abaft the starboard bunk is the miniature galley, consisting of a solid alcohol two-burner stove, with dish, glass, and pot lockers surrounding it. Here also is the fresh water pump. Opposite is a quarter bunk which will sleep a child or two but which is used principally for stowing bedding and the like.

The fifty-gallon water tank is installed under the cockpit, while flanking it on each side are two twenty-five-gallon gasoline tanks. Offset slightly to port is the Falcon 15 h.p. four-cylinder motor. Through a reduction gear the motor turns an 18 x 12 Thompson feathering propeller, giving a speed under power of about six knots.

Hotspur's sails, totaling 615 square feet, were cut by Ratsey of 7-ounce Egyptian cotton, and her hollow mast was made by Pigeon. Merriman blocks, deck winches and cleats are used, and all the fittings and rigging are exceptionally strong and durable.

HACKERCRAFT IN CALIFORNIA

The firm of Fellows & Stewart, boat builders on the Pacific Coast, are now acting as Hackercraft distributors for Southern California. They are uniquely situated to sell and service all models of Hackercraft and, according to James M. Schuck, Sales Manager, the representation of Hackercraft was taken on in response to the remarkable increase in interest and activity toward fast motor boating.

Joe Fellows, President of Fellows & Stewart, during his racing days designed and built the fastest racing craft on the Pacific Coast, and has won more prizes than any other single individual in Pacific Coast racing. Therefore, from the adoption of the Hackercraft line by this organization, it is seen that the acceptance denotes the high esteem in which Hackercraft is held—not only by the boating public, but by the boat-building fraternity.

Fellows & Stewart are showing several Hackercraft models in their Wilmington, California, show room.

A NEW 151 CLASS ASSOCIATION

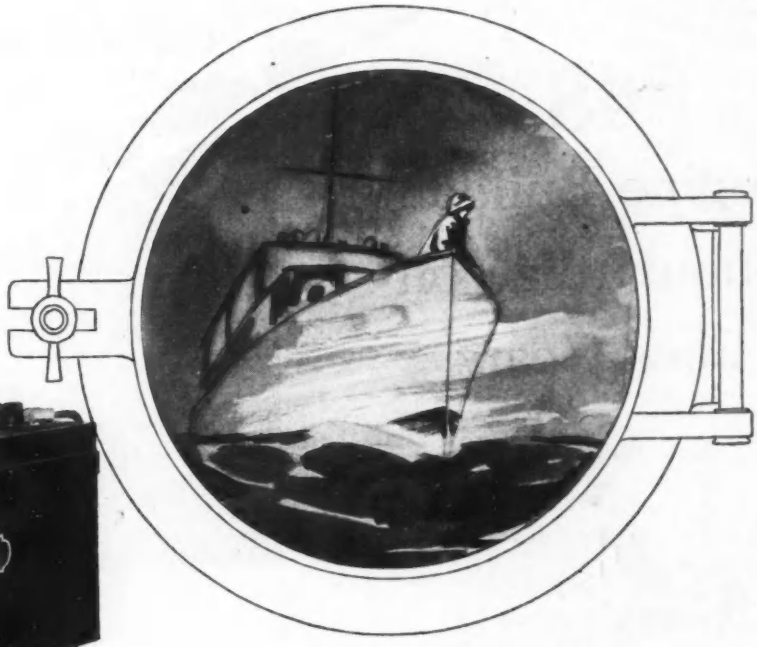
At Albany on July 4, owners of all 151 racing boats met to form a new association to further the interests of the racing men.

It is the intention of the association to see that proper arrangements are made in advance to take care of racing men; supplying their needs in the way of derricks, floats, patroling of course, etc.

To qualify for membership, an applicant must own a 151 boat or have driven one in a race during the past year, and all memberships are subject to the ruling of the qualifying committee.

Among those present were Elmer H. Johnson, owner of Sparrow; Gibson Bradfield, owner of Buckeye; E. W. Hammond, owner of Miss Westchester II; Chris. Ripp, owner of Meadowmere; Frank Ripp, owner of Bay Head; C. L. Hall, owner of Thunderbolt; Ralph Sheldon, Jr., owner of Little One; J. Galloway, President of the Adirondack Circuit; Al. Louvet; and Cliff. S. Hadley of Ozone Park, Long Island, owner of Hadley Plane IV, who was appointed secretary and who will be pleased to give full particulars to any one interested.

Advertising index will be found on 3rd last page



. . . Fog
uneven current loads

Navigating in "thick" weather means sudden heavy drains on your electrical supply. Your storage battery may be needed any minute to deliver at the maximum discharge rate for *hours*.

Depend on a Willard's built-in quality to get you safely out of the fog. Heavy lead plates, effective insulation and terminals steady as a mooring bitt.

Write the distributor nearest your port for information and assistance in selecting the proper battery for your boat.

Address Your Nearest Factory Distributor

BOSTON, MASS.,
Statler Bldg.,
Rooms 1126-1127

CHICAGO, ILL.,
3916 South Canal Street

CLEVELAND, OHIO,
1920 Scranton Road

DETROIT, MICH.,
5946-54 Cass Avenue

LOS ANGELES, CALIF.,
16th and Hope Streets

NEW YORK CITY, N. Y.,
551 Fifth Avenue

PHILADELPHIA, PA.
3619 Walnut Street

PORTLAND, OREGON,
9th and Everett Streets

SAN FRANCISCO, CALIF.,
480 Second Street
1380 Bush Street

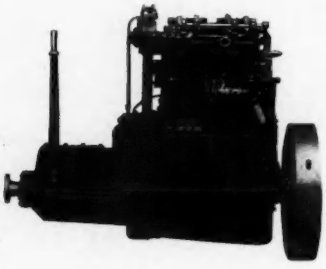
SEATTLE, WASH.,
Fourth Ave. & Blanchard St.

Willard Storage Batteries are the result of over twenty-five years of battery manufacture. Lead, lead compounds, battery solution and all materials are thoroughly tested before going into the battery, and each battery is rigidly inspected before leaving the factory.

MARINE BATTERIES

Willard

48 Engine Builders Standardize on Joes Gears



WELCOME, *Frisco-Standard!*

OLD MAN JOE welcomes this popular engine into the "family of 48" with much satisfaction. The selection of Joes Gear as standard stimulates his pride. For, such powerful heavy-duty engines can afford to associate with none but equals, when it comes to equipment. For Bulletin 2A describing Joes Gears, also a 1929 vest-pocket calendar, compass card, and 'Rules of the Road,' write the Snow and Petrelli Mfg. Co., 19 Fox Street, New Haven, Conn.

Sales and Service in 30 Ports—

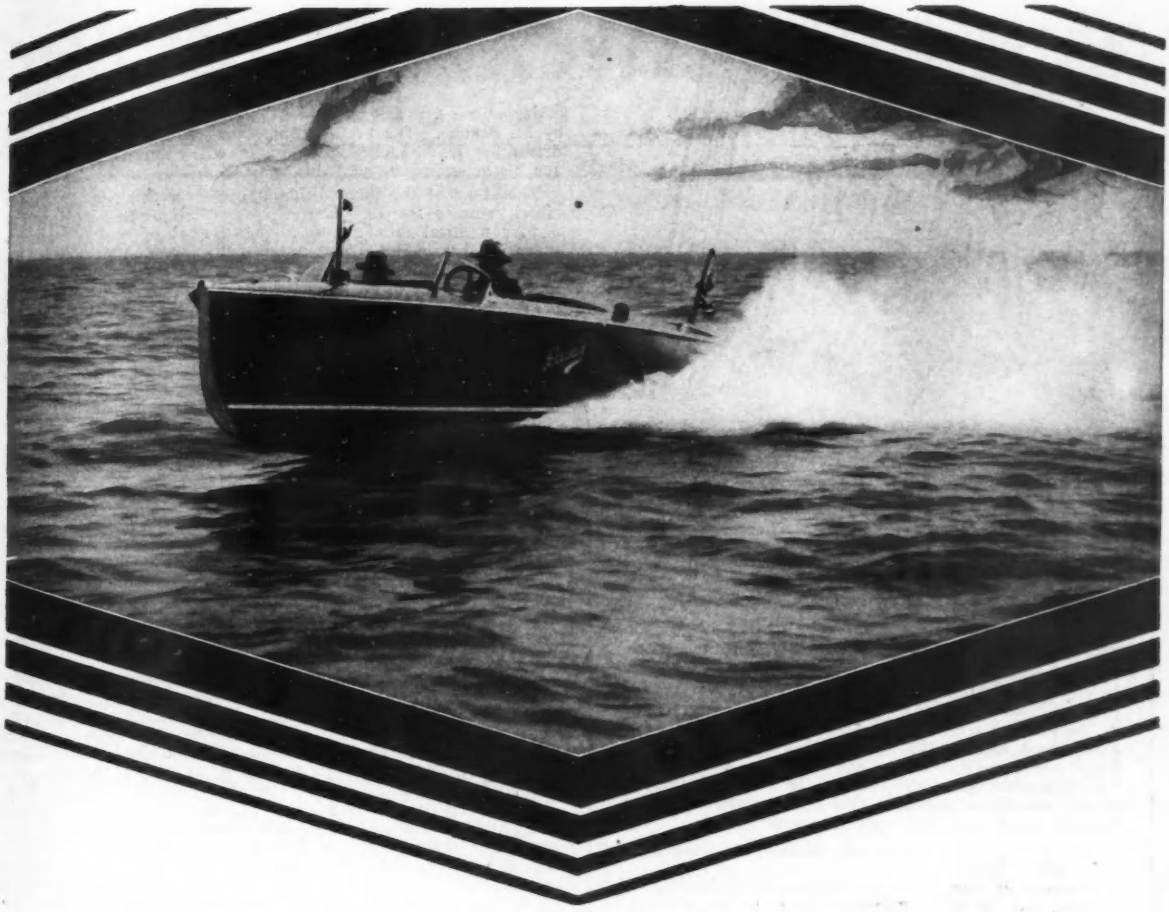
New York.....Sutter Brothers
Boston.....Gray-Aldrich Co.
Philadelphia.....W. E. Gochenaur
Baltimore.....Mahon & Gall
Washington.....Barber & Ross
Norfolk...Gas Eng. & Boat Corp.
Miami.... .....Berner-Pease Co.
Mobile.....Marine Supply Co.
New Orleans.....Duvic's Sons
Galveston.....Gal. Marine Sup.
Wilm,. Cal.....Fellows & Stewart
S. F.. Cal.....Johnson, Joseph & G. M. Josselyn
Portland, Ore.....Marine & Fisheries Supply Co.
Seattle.....Pacific Marine Eng.
Chicago.....W. L. Masters
St. Louis.....Wm. Grossmann
Detroit.....H. H. Smith & Co.
Grand Rapids... Mich.Wheel Co.
Cleveland.....Wm. F. Meier
Clayton N. Y..St Lawrence River Motor & Machine Co.
Rochester N. Y.....V. E. Lacy
Vancouver.....Hoffar-Beeching
Toronto.... .....A. R. Williams
N. B. Can.....McAvity & Sons
Newfoundland .....John Barron
Buenos Aires.....Jose Banham
Canada.....Can. Fairbanks-Morse
Rotterdam.....Fred J. Kemper
London.....J. King & Co.
Melbourne.....Acme Cycle Co.

JOES
FAMOUS REVERSE
GEARS

REVERSE 80%-88% *of Motor Speed*

JOES 200 SERIES HAS THE DOUBLE CLUTCH — PROTECTED BY PATENTS

Advertising index will be found on 3rd last page



An International Champion

The International Stock Runabout Championship Race at Potsdam, Germany, June 1 and 2, was won by Herr Richard Bussey driving the Buzzard III, a 26 ft. Hacker Craft powered with a 200 H. P. six cylinder valve-in-head Kermath marine motor.

The winning of this event now makes Kermath victorious both at home and abroad.

Using 26 ft. runabouts equipped with 200 H. P. Kermaths, the winners have averaged better than 40 miles an hour.

This is proof of the most convincing kind of the speed, staying power, reliability and never-failing dependability of the Kermath motor.

An illustrated booklet describing in detail each of the 15 time tried models in the Kermath line will be mailed upon request.

3 to 200 H. P. **$135 to $2300**

KERMATH MANUFACTURING COMPANY

5879 Commonwealth Avenue, Detroit, Mich.

90 King Street, W., Toronto, Ontario

***New York Show Rooms*—5th Avenue & 15th Street**

KERMATH

"A Kermath Always Runs"

This Book—Our Gift to You!

The new Yachtsman's Guide is the only complete, up-to-the-minute yachting encyclopedia published. It contains 500 pages crowded with just the sort of practical information every motor-boat man wants. A copy of this invaluable volume should be aboard every boat and in the library of every yachtsman's home—on hand for immediate reference at all times. The following list gives you merely a partial glimpse of the wealth of material this book contains. Read it—then send for your copy at once!

All about engines—Installation, ignition, vaporization and operation.

Hundreds of helpful hints on outfitting and overhauling.

More than 100 Motor Boatmen's Charts for the entire Atlantic Coast, Great Lakes and Canada.

Marine Laws—Rules of the Road at Sea.

What to do if the motor stops unexpectedly.

Times of high and low water and direction and velocity of tides in all ports.

Latitude and Longitude Tables, giving locations of over 1,000 points.

All kinds of marine codes, flags, etc.

Details of hundreds of cruise routes, description of ports and channels, marine signals, codes, flags, etc.

Characteristics of lights, buoys, fog signals, etc.

Numbering Law—How to obtain numbers for your boat.

What to do in a storm—to prevent collisions.

How to organize a yacht club—Constitutions and By-Laws and many other helpful features.

Send for Your Gift Copy Today

"The Yachtsman's Guide" sells regularly for a good round sum, which we are willing to forget if you take advantage of this special offer of MoToR BoatinG for one year at $3.50 with "The Yachtsman's Guide" as a Gift. You would pay $4.75 for a year's single copies of MoToR BoatinG, anyway. So the book costs you nothing at all, and you save money on your subscription besides.

MAIL THE COUPON NOW

MoToR BoatinG, Dept. 729,
57th Street at 8th Avenue, New York, N. Y.

I desire to take advantage of your Special Offer and get a copy of "The Yachtsman's Guide" as a gift, with my subscription to MoToR BoatinG for One Year at $3.50, saving me $1.25.

Name .....

Address .....

City..... **State**.....

(Remit now and an extra issue will be added to your subscription.)

Postage outside of U. S. and Canada $1.00 extra a year.

America Wins Again

(*Continued from page* 43)

Bela, owned and driven by F. T. Bersey and Bull Dog owned by M. Brooke. The French competitor was Sadi IV, owned and driven by Dr. E. Etchegoin who holds many international records for his achievements with his boats.

The story of the three different heats for this famous cup is closely similar for all. The course consists of five laps around a four nautical mile circuit giving a total of twenty nautical miles per heat. Each heat counts with four points awarded to the winner, two for the second boat and one for the third. Since all boats compete in all heats the country building up the highest point total becomes the winner of the trophy.

The first heat started with the American boat several hundred yards behind the other competitors although once underway, he was soon traveling at high speed and at the end of the first lap was half a mile ahead. He slowed down at the end of each of the first few laps to effect minor adjustments during which time the British boats passed him although he quickly overtook them later. He finished far in advance of the others with Newg second and Bull Dog third. Rioco's speed in the first heat was 32 knots with Newg second at 31.20 knots and Bull Dog 30.75 knots.

On the second day the conditions were closely repeated with the exception that Sadi the French contestant developed engine trouble and withdrew while the others again finished in the same order as on the first, that is Miss Rioco III first, Newg second, and Bull Dog third. The last of the three days racing showed a repetition for the winner Rioco III and on this day Newg got into difficulties and withdrew, leaving only Bull Dog to battle it out with Ralph Snoddy. These two boats were the only ones to finish the three heats and the last one Snoddy won by nearly a whole lap, Bull Dog being far behind. The speed was 77.45 knots. The winner, Miss Rioco III is a new hydroplane equipped with an engine of 1½ liters displacement fitted with a Robert Bosch high tension magneto. It was built for Commodore Talbot particularly for this race and fulfilled its duty in winning this famous trophy for America. The history of the Duke of York Trophy dates back to 1924 and it was then won by Great Britain and in each of the following years through 1926, an English boat was successful in winning the races. In 1927 Little Spitfire, owned by Mrs. J. H. Rand succeeded in taking this trophy to America while in 1928 an English boat, Miss Betty, again proved to be the winner. With an American victory this year, the Trophy comes back to this side of the Atlantic for another year's sojourn.

To add interest to the program, races were held during the meet for boats of other classes particularly outboard races and races for boats of the cruiser type. Weather conditions were not particularly favorable for the outboards as many of them met with mishaps which eliminated them from the contest. The International outboard Trophy competed for on the first day by many English outboard drivers, was won by British Maid I owned by Colin D. Fair at a speed of 35.84 miles. A championship race for outboards of class C was won by H. P. Bomford driving Seahopper VI at a speed of 29.11 knots. There were other races and events on the program but available reports give no information concerning these. It is, however, a fact that the regatta was highly successful with keen competition and much interest on the part of the public which would indicate that boating has taken hold of the British public in the same way that it has in this country.

LADY LU II

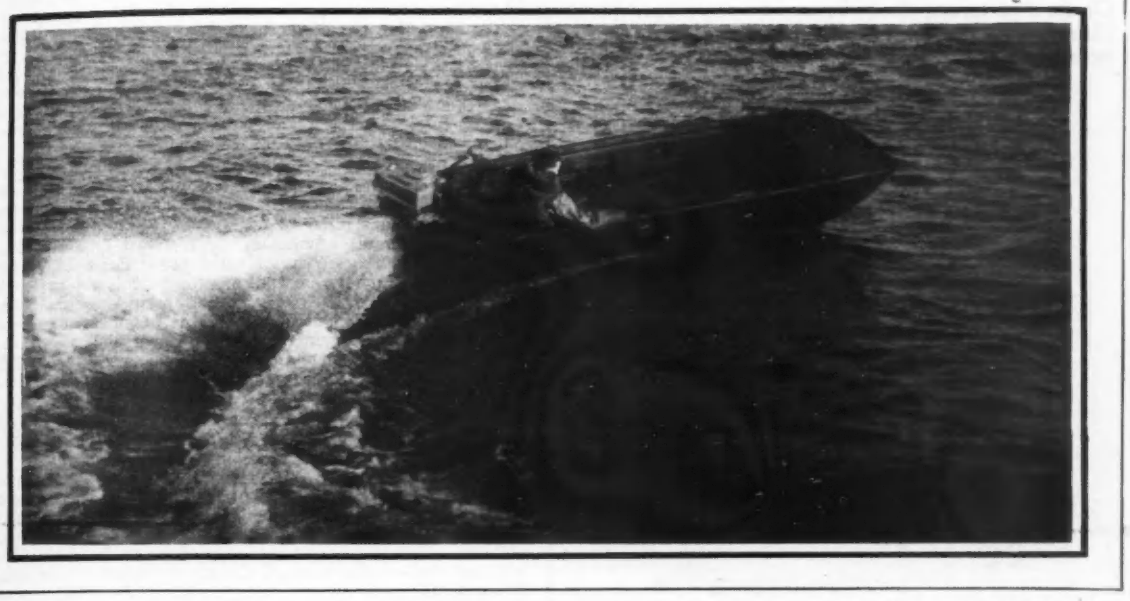
It is something quite out of the ordinary when a driver wins three firsts out of three starts. Yet this is the record of C. B. Holland of Beaumant, Texas, and his Evinrude Speeditwin-powered Lady Lu II.

It would seem that down in Texas when they do things at all, they do them right, for certainly the record of winning every start is a record of which to be proud. Mr. Holland, who is in the outdoor advertising game, entered his boat in the Sabine District outboard marathon race, from Beaumont to Port Arthur, Texas, and return, and came home with the victory and a beautiful trophy cup. Lady Lu II negotiated the distance from Beaumont to Port Arthur, 60 miles, in the excellent time of 2 hours, 5 minutes, an average of nearly 30 m.p.h., despite the fact that it was rough and choppy. We believe this is quite remarkable and Mr. Holland can well be proud of coming out victorious in this and the other two races in which he participated. Lady Lu II did a remarkable piece of personal advertising for Mr. Holland, which certainly ought to prove valuable to a man in the outdoor advertising service.

Advertising index will be found on 3rd last page

Sea Sled ~ *Sui Generis*

(Meaning—there ain't no other)



Of all the small craft built, little Model 13 is the most perfect demonstration of the Sea Sled principle of Safety

THE SEA SLED CORPORATION builds the safest fast small craft in the world.

The Sea Sled Corporation is the *only* builder of Sea Sleds in the world.

Three years ago the Sea Sled Corporation was building a limited number of fine boats to order. In the last two years it has forged to the lead in quantity production of quality craft—all mahogany hulls.

The Sea Sled Corporation is the largest user of national advertising of any boat builder in America—which means the world.

And the secret of this rapid rise to supremacy lies in the one word

SAFETY

Model 13 has seaworthiness, speed, carrying capacity and endurance. She is the safest and most competent fast small craft in the world for boys and girls, hunters and fishermen and families who camp.

Boat owner and boat dealer alike are profiting by the safety of Sea Sleds, the sturdy integrity which is built into them and the improvements which can only come because of the economies of quantity production.

TRADE-MARK REG. **SEA SLED** U. S. PAT. OFFICE

THE SEA SLED CORPORATION

Sole Licensee under Hickman U. S. Patents

226-228 Fourth Ave. at 19th St., New York

Yards at W. Mystic and Groton, Conn.

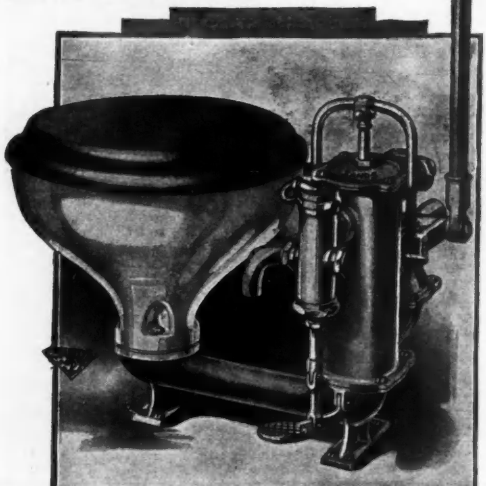
HIGHEST FACTOR OF SAFETY **SEA SLED** OF ANY CRAFT OF THE SIZE

SPEED · · WITH COMFORT AND · · SAFETY

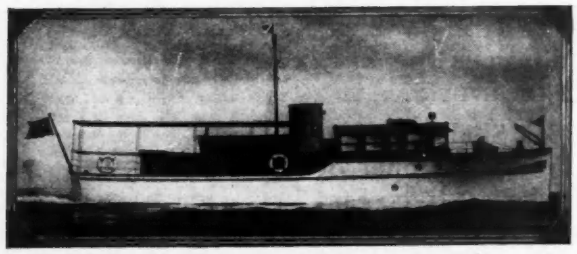
SANDS

Standard Equipment for

Elco, Herreshoff, Luders, A.C.F., Chris-Craft, Sea-Lyon, Red Bank, Richardson, Humphrey's, Chance-Marine and other prominent builders.



A. B. SANDS & SON CO.
22-24 VESEY STREET -:- NEW YORK CITY



All the Cruising Qualities of a Large Diesel Yacht in a Fifty-Six Footer

800 to 1000 miles cruising radius without refueling, an operating cost one-third that of gasoline engines of equal power and seaability that instils absolute confidence in safety are yours in the Townsend Fifty-Six Foot Twin-Screw Diesel Cruiser. This beautiful custom-built craft, selling at a production boat price, is individualized by its superior design, painstaking perfection of details and livableness of its accommodations.

The Townsend's accommodations for a party of six include: two richly appointed staterooms with private lavatories; large deckhouse for dining, dancing or cards; spacious canopy covered aft deck for lounging; a complete galley with electric refrigeration; and quarters for crew of two. These are a few of the many big yacht features found on the Townsend. Mechanical equipment and accessories are of the most advanced type and include electric lighting plant and electric windlass. Powered with two 75 h.p. six-cylinder Hill Diesel engines, it has a speed of 14 to 16 miles per hour.

One Townsend cruiser is now ready for immediate delivery. Demonstration in New York waters may be arranged by appointment. Write to-day for further particulars.

TOWNSEND

Townsend Boat Building & Engine Co.

1418 Packard Building, Philadelphia, Pa.

Plant: Fairhaven, Mass.

What Is An American Outboard Record

(*Continued from page* 18)

Commission. No specific duties shall be assigned to the Referee, such as a timer, surveyor, inspector, judge, etc. He will not act as a member of the Race Committee or any other Committee in connection with the race or regatta. He may advise the Race Committee or make suggestions for the proper handling of the race. He has power to enforce the conditions demanded for a proper basis for records. He must insist that all provisions of the racing rules be complied with when records are at stake. He may decline to allow a speed made to be considered as a record, if in his judgment the rules have not been complied with or enforced. His suggestions to the local committee as to course, conduct, inspection and compliance with the rules, etc., must be observed.

Immediately after the conclusion of any race, where an official American Outboard Record is claimed, the Referee must make a report on blanks provided for the purpose and file a copy of this report with the member of the National Outboard Racing Commission in his district for each record claimed. No record becomes official or can be announced until this report has been filed by the Referee and received and approved by the National Outboard Racing Commission. If in its judgment, the National Outboard Racing Commission believes that the record should be allowed, then the Commissioner will announce it as an Official American Outboard Record. Until this is announced by the Commission, no outboard record is official.

All of the outboard motor manufacturers and most of the principal hull manufacturers have agreed to co-operate with the American Power Boat Association, the Mississippi Valley Power Boat Association and the National Outboard Racing Commission and have informally agreed that they will not make use of in their news, publicity or advertising, any new outboard record, or make claims of any speeds greater than existing American outboard records until such record or claim has been passed upon and approved by the National Outboard Racing Commission. In this way, the public is protected from fraudulent claims of speed and outboard records.

The various questions which the Outboard Referees must answer in filing their reports to a member of the National Outboard Racing Commission are as follows:

Note: (Answer Yes or No.) Questions Apply to Boat Claiming Record.

1. Did any member of the local Race Committee take part in the decision of any question in which he was directly interested? (Rule I) *No.*
2. Did the motor comply with the definition of an outboard motor? (Rules II, III and XIX) *Yes.*
3. Was more than one motor used at one time in boat claiming record? (Rule II, Sec. 1) *No.*
4. Was the boat properly muffled, except during the race? (Rule III, Sec. 3) *Yes.*
5. In heat races, were there any changes of motors, hulls or crews during or between heats? (Rule II, Sec. 4) *No.*
6. Was each Class (A, B, C, etc.) run separately? (Rule II, Sec. 5) *Yes.*
7. Did the motor comply with the definition of a stock motor? (Rule II and XX) *Yes.*
8. Did the division of drivers and owners comply with Rule IV? *Yes.*
9. Was owner or driver an employee of any outboard manufacturer or being paid to race by any outboard motor manufacturer? (Rule IV, Secs. 1 and 4) *No.*
10. Was entry made on an official entry blank, with affidavit and release signed previous to the race? (Rule V) *Yes.*
11. As far as you know was entrant familiar with the Racing Rules? (Rule V, Sec. 1) *Yes.*
12. Were there any false affidavits signed or presented? (Rule V, Sec. 3 and 7) *No.*
13. Was entry filed or accepted within 24 hours of start of race? (Rule V, Sec. 8) *No.*
14. Were life preservers worn by all members of the crew? (Rule VI, Sec. 1) *Yes.*
15. Was boat and motor available for inspection by the proper committee? (Rule VI, Sec. 3) *Yes.*
16. Did boat leave race course during heat or race? (Rule VI, Sec. 4) *No.*
17. Did driver comply with age restriction? (Rule VI, Sec. 7) *Yes.*
18. Was heat or race postponed without permission from entrants? (Rule VI, Sec. 9) *No.*
19. Were the owners of boats notified in writing if it was found that boat had violated any rule? (Rule VI, Sec. 12) *Yes.*

(*Continued on page* 114)

Advertising index will be found on 3rd last page

DAWN BOAT CORPORATION
ESTABLISHED 1906
YACHT BUILDERS
NAVAL ARCHITECTS
GLASON POINT
NEW YORK CITY

"THE DAWN 45 FOOTER"

May 29,1929.

Mr.C.P.Price,
Standard Oil Co.of N.Y.,
544 East 120th Street,
New York City.

My dear Mr. Price:-

We have experimented with a number of high grade lubricating oils in our marine motors and have found the SOCONY "Aircraft" oil extremely satisfactory and are pleased to advise you that hereafter all DAWN cruisers will be delivered with two five gallon cans of this oil.

We wish to thank you for your cooperation in procuring the grade of oil most adaptable for our needs.

Very truly yours,
DAWN BOAT CORP.
C B Nelson
Vice Pres.

CBN AM

"THE DAWN 45 FOOTER"
ploughing the water with Socony-lubricated motor.

"All Dawn Cruisers will be delivered with two 5-gallon cans of this oil"

THAT'S what one large boat manufacturer thinks about one Socony product. For all water craft—from the tiniest of outboard motors to the most stately of cruisers—Socony products insure maximum performance and economical operation.

For your convenience Socony marine stations have been located at all the important points throughout New York, New England and on Long Island. Look for the familiar red, white and blue Socony colors.

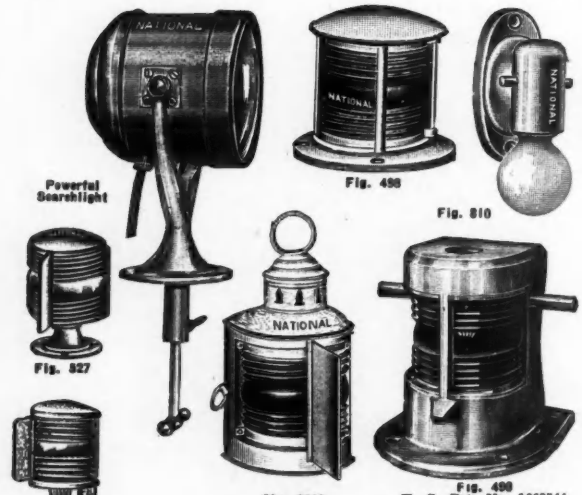
SOCONY
REG. U. S. PAT. OFF.

SPECIAL GASOLINE • AIRCRAFT OIL

STANDARD OIL COMPANY OF NEW YORK

The NATIONAL MARINE LAMP COMPANY

FORESTVILLE, CONN., U. S. A.



We manufacture a complete line of Poweray and Lebby Searchlights, running lights and cabin fixtures, outboard specialties and marine type electric house fixtures. Ask for National Marine Products at your dealer—look for the Trade Mark. Write for circular to Dept. G.

STURGES ANCHOR HOIST

Makes Anchor Raising Easy

THIS simple practical device makes anchor raising the easiest job on your boat. The Sturges Anchor Hoist provides every requirement for lowering and raising the anchor with minimum manual effort. When not in use, the davit and the hoist can be unshipped, leaving only the base on deck. The Sturges Anchor Hoist is made for any type of anchor up to 100 lbs. Sturdily built, heavily galvanized. Furnished entirely in brass at slight extra cost. The davit can be designed especially to fit your boat without extra cost.

Rope is easily applied in open type block.
Model No. 2 with 3 speed transmission, for anchors 60 to 100 lbs. The low speed gives powerful leverage for breaking the anchor loose from a mud bottom. Second speed (on which the handle is shown) is normally used for hoisting the anchor. The high speed or direct drive on main shaft is for quickly reeling in the slack of the rope. This model also has powerful brake for lowering anchor into water.
Made in three different sizes.
You will be surprised at the many features of the Sturges Anchor Hoist. Let us explain them to you. Write today for details and prices.
Davit unships here.
Carrying handle.
Windlass unships here.
Combination base, including bitt, adds to appearance of boat.
Patent Applied For

Easily installed by anyone without disfiguring or marring your cruiser in any way.

STURGES ANCHOR HOIST

5 Kensington Road. Bronxville, N. Y.

What Is An American Outboard Record

(*Continued from page* 112)

20. Do you consider that boat was unseaworthy, unsafe, unmanageable or has failed to live up to the spirit or letter of the rules? (Rule VI, Sec. 16) *No.*

21. Were the quarters occupied by the Race Committee properly maintained? (Rule VI, Secs. 17 and 19) *Yes.*

22. Did the Race Committee carry out all provisions of the rules? (Rule VI, Sec. 20) *Yes.*

23. Was all lettering on boat confined within a space three feet from the boat's stern? (Rule VII, Sec. 1) *Yes.*

24. Did boat carry racing number? (Rule VII) *Yes.*

25. Was each starter furnished with written or printed instructions? (Rule VIII) *Yes.*

26. Was the boat and motor inspected by an inspector appointed by the local committee? (Rule IX, Sec.s 1, 2, 3, 4) *Yes.*

27. Has a certified chart of the course been prepared by the surveyor and forwarded to the proper authorities in the American Power Boat Association or Mississippi Valley Power Boat Association and the National Outboard Racing Commission? (Rule X, Sec. 5) *Yes.*

28. Was the length of the course measured in a straight line from buoy to buoy? (Rule X, Sec. 3) *Yes.*

29. Were all turns to the left? (Rule X, Sec. 4) *Yes.*

30. Was the course surveyed by and its length certified to by a certified surveyor? (Rule X, Sec. 5) *Yes.*

31. Were the position of all buoys checked before, during and after each heat and race? (Rule X, Sec. 6) *Yes.*

32. Did the form of start and starting signals comply with the rules? (Rule XI, Secs. 1 and 4) *Yes.*

33. Were all boats that crossed the starting line before the starting signal disqualified? (Rule XI, Sec. 2) *Yes.*

34. Was the starting line sufficiently long? (Rule XI, Sec. 3) *Yes.*

35. Were the provisions of Rule XI, Secs. 5-9, complied with? *Yes.*

36. Were officials present at or near each turn? (Rule XII, Sec. 3) *Yes.*

37. Were the boats timed by at least three competent timers using checked stop watches, chronometer, or electrical timing device? (Rule XV) *Yes.*

38. Were there any violations of Rule XVI? *No.*

39. Were any of the winning boats protested? (Rule XVII) *No.*

40. Were the prizes presented according to Rule XVIII? *Yes.*

41. If mile trials were held were all the provisions of Rule XXI complied with? *Yes.*

42. Was the length of the race or heat, 5,.6, 10 or 15 miles or in the case of mile trials, one statute or one nautical mile? (Rule XXXII, Sec. 1) *Yes.*

43. Was the length of one lap of the course 2½ or 3 miles? (Rule XXII, Sec. 4) *Yes.*

44. Were there at least 5 starters in each race when a record is claimed? (Rule XXII, Sec. 6) *Yes.*

45. Was the race sanctioned by the American Power Boat Association or Mississippi Valley Power Boat Association? (Rule XXII, Sec. 7) *Yes.*

46. Is the claim for record restricted to Division I or II? (Rule XII, Sec. 8) *Yes.*

47. Was the Referee present assigned to the race by some member of the American Power Boat Association or Mississippi Valley Power Boat Association? (Rule XII, Secs. 11 and 12) *Yes.*

48. Was the motor claiming a record inspected by a person or persons appointed by the Outboard Motor Manufacturers Trade Association? (Rule XII, Sec. 16) *Yes.*

49. Has a complete report of race been filed with a member of National Outboard Racing Commission? (Rule XXIII) *Yes.*

50. Were all the suggestions and instructions given to the local race committee by the Referee carried out? (Rule XXV, Sec. c) *Yes.*

51. Were a set of the manufacturers specifications of the motor available? (Rule XX, Sec. 2) *Yes.*

52. If the record claimed is for one mile trials were all the provisions of Rule XXI complied with? *Yes.*

53. Was the boat timed, the course surveyed and the motor inspected by persons approved by the American Power Boat Association or Mississippi Valley Power Boat Association? (Rule XXII, Sec. 18) *Yes.*

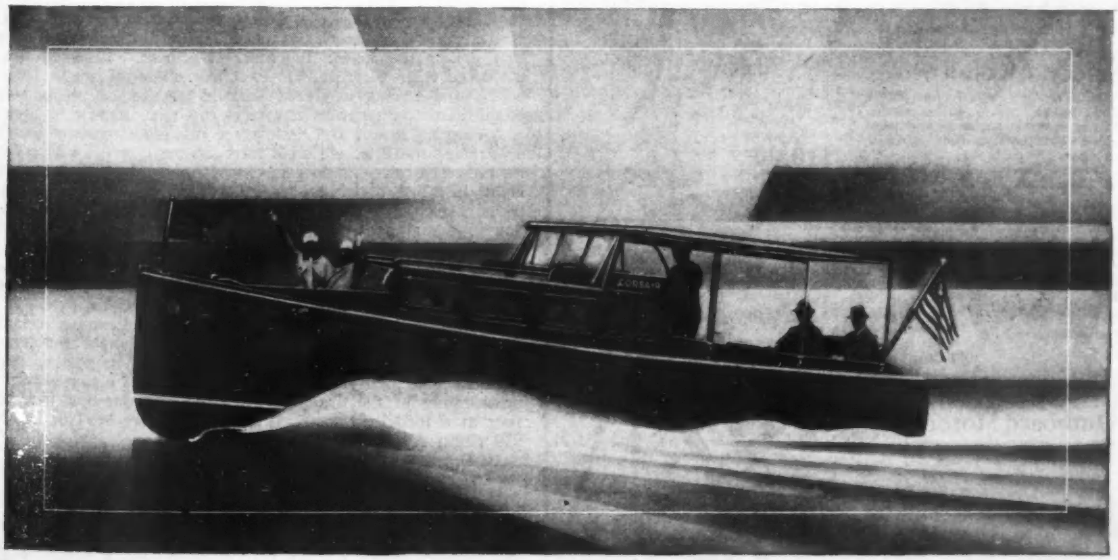
54. Was the driver of the boat claiming a record a member of some club belonging to the American Power Boat Association or the Mississippi Valley Power Boat Association? (Rule XXII, Sec. 19) *Yes.*

(*Continued on page* 116)

Advertising index will be found on 3rd last page

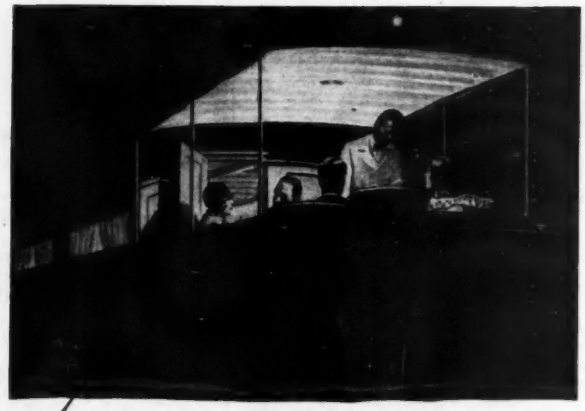
CORSAIR

HIS isn't an ad. It's a confession. A word-weary copyman is going to tell you why he sticks to his job — and why he throws away his Thesaurus and book of synonyms when he works on Corsair copy. Over two years ago, I wrote the ad that introduced this craft — wrote it from the blue-prints — for the first Corsair wasn't yet off the ways. That's a *job* for a landlubber. Believe me, I sweated over it! And even then the salty terms didn't quite ring true. Ad number two came along—but in the meantime, Corsair Number One had hit the water with a splash heard 'round the world. I was one of the first to feel the thrill as it cut through the water. Did I labor over that second ad? I did not! It wrote itself. The typewriter jumped and clattered as the words rushed out. I *lived* it. I *felt* it. I *loved* it. Words I'd never known were whipped into my brain as the keen wind whistled by. Sentences built themselves, and surged out as one long roller follows another. Adjectives sparkled like spray that's tossed in the sunlight. "Boy," I thought, "and I make a living doing this!" ¶ Now every month, come copy-time, I'm down for my regular ride. Worn and jaded when I step aboard—there's a thrill that can't be described when I hit the deck. New life floods in. Did I say that this wasn't to be an ad? I'm sorry — but it's turning out to be one — for I'm going to ask you to try a dose of the same medicine that makes a new man out of me every month. 'Round the Horn in an afternoon—that's what it's like. If there isn't a Corsair dealer nearby to give you a ride—write in for catalog number M-B-8. Its pages will take you cruising.



CORSAIR BOAT COMPANY

1030 BUHL BUILDING -:- DETROIT, MICHIGAN



$275
COMPLETE
f.o.b. Port Chester
600 Watt 32 Volt Generator with built-in, air-cooled Gasoline Engine
80 Ampere Hour Storage Battery
Starting Switch

Shorter days.... more lights

Fine fall nights ahead for boating. Plenty of light aboard?

A Homelite Electric Generator will provide juice for 40 lights, for running pumps, percolator, anchor hoist, etc.

Generator stows in 21 x 14 x 21 inches. Weighs 110 lbs. Costs but $275 f.o.b. factory.

Small enough for 30-footers, big enough for 70-footers. Write!

HOMELITE CORPORATION
79 Riverdale Ave., Port Chester, N. Y.
Distributors throughout the world

HOMELITE
Portable Electric Light & Power Plant 3750

"Wilco" Boat Specials

Safety Alcohol Stove
Install a "Wilco" Alcohol Stove and make your galley safe. Water spreads kerosene and gasolene but extinguishes alcohol at once.
2-Burner Stove as illustrated..... **$22.50**

"Wilco" Searchlight

Handsomely constructed of brass and bronze throughout, and built to withstand hard usage. 6-volt equipment supplied unless otherwise specified. In buff enamel.
$10.00

8-Day Boat Clock
Golden Glow Face, attractive nautical design, with fully guaranteed 8-day movement. No bells but it runs correctly from one week-end to the next.
4-Inch Face..... **$9.75**

Outboard Motor Carrier
So easy to move your motor from boat to locker on this handy carrier. Keeps motor in proper position for Winter storage and overhauling..... **$20.00**

Most complete line of Boating Accessories in the Country.

These items illustrate a few of the large number of boating necessities shown in our general catalog. Write now for your copy.

THE E. J. WILLIS CO.
85 Chambers Street, New York City, U. S. A.

What Is An American Outboard Record

(*Continued from page* 114)

55. I, the Referee, duly appointed by the National Outboard Racing Commission and designated by ..... to be present at this regatta, set forth below any exceptions in the Racing Rules noted above in Secs. 1-54.

56. Other exceptions and violations noted:

.....

.....

.....

.....

.....

57. I hereby certify that the above is a true and correct report.

Signed .....
Name of Referee

Date .....

NOTE: ADDITIONAL BLANKS MAY BE OBTAINED FROM ANY MEMBER OF THE NATIONAL OUTBOARD RACING COMMISSION.

This sturdy 43-foot steel tug was built by the Bath Iron Works. A 4-cylinder 50 h.p. Cummins Diesel supplies abundant power

Benbow, a Deep Sea Auxiliary

(*Continued from page* 64)

room here under the side deck for a dish locker and under the wash tray for pots, pans, and all those miscellaneous supplies that gather themselves together on a boat. I should line the partition with Newtile, an excellent material made from asbestos and having a glazed surface marked off in squares. It is screwed to the walls, not stuck up with sement or glue.

A hanging locker and desk grace the space opposite the galley and under the desk we shall have an ice box. Two very comfortable full size bunks are fitted forward; the water closet being installed under the seat between the bunks. In the extreme eyes there is room for anchor chain and small gear of one kind and another that has to be tucked away somewhere.

Next month I shall show the construction plans of Benbow together with sketches that should be of interest to prospective builders. By the way, one of these cutters can be built complete with engine, sails, cushions, etc., for $5,000.

MoToR BoatinG has published some excellent books for boat designs and building instructions which amateur builders will find useful. A circular describing these will be sent on request. Readers who plan to construct this boat can also secure blue print copies of the drawings to a scale of one-half inch to the foot at a moderate cost. Write the Editor, MoToR BoatinG, 959 Eight Avenue, New York, N. Y.

JERSEY SHORE NOTES

Flora, owned by Mr. McCahan, of Ocean City, N. J., was launched recently. This is a special 30-foot Hacker runabout powered by a 600 h.p. Packard engine and is capable of operating at a speed around 60 miles per hour. Mr. McCahan hopes to represent the Ocean City Yacht club not only in these waters, but also at Philadelphia and Norfolk regattas.

Wheezer, owned by David E. Kaye, of Ocean City, is having an 8-cylinder 125 h.p. Gray installed. There will be keen rivalry between this boat and Miss Longport, which was built last summer and powered with the same kind of an engine.

Advertising index will be found on 3rd last page

IT MAKES A BIRD OF A BOAT

NATURALINE—THE NEW MARINE FUEL

FOR your runabout, outboard, or speed boat, Naturaline—the new marine fuel already famous as an aviation fuel—will give you surprising results.

Naturaline is a new fuel that is different and better than the ordinary domestic gasoline. It is made entirely from *natural* gasoline, which is a liquid condensed from the petroleum gasses given off at the oil well.

You will find Naturaline quicker-starting, more powerful, speedier, and smoother in your marine engine than ordinary domestic gasolines. It is lighter by one-half pound per gallon and is absolutely free from impurities because no acids or salts are used in the refining process; and its volatility is of such a character as to start the coldest motor quickly.

Ask your water front gasoline dealer for Naturaline. Try it. If not available, write to the Naturaline Company of America, Tulsa, Oklahoma.

Naturaline has already made a name for itself as an aviation fuel. Where motors are operated at wide open throttle as in an airplane or fast motor boat, it soon proves its superiority. In the recent Gardner Aviation Cup Races from St. Louis to Indianapolis and return, the first four airplanes were fueled with Naturaline.

Mr. B. Meier, President of the Rochester Marine Company, Inc., says, after testing Naturaline in a 750 cu. in. piston displacement racing hydroplane powered with a 220 H.P. French Hispano Suiza, "The results were so marked and of such decided advantage in a racing job that there is absolutely *no question of the superior qualities of Naturaline.*"

NATURALINE
THE SUPER AVIATION MOTOR FUEL

Product of Naturaline Co. of America
Chestnut and Smith Bldg., Tulsa, Okla.

For Tenders, Sea Skiffs, Runabouts, and Small Cruisers

The NIAGARA "SPECIAL"

4 Cyl. 12-15 H.P.

Is Most Emphatically the Ideal Power Plant

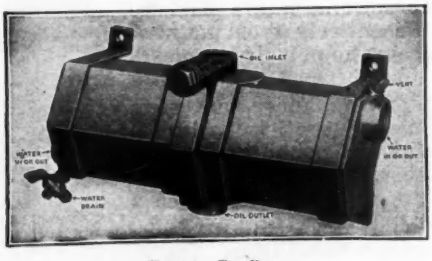
It is a complete power unit; more power; compact; free from freak features; simple, sturdy, economical in first cost; inexpensive to operate, long lived; thoroughly standardized as to parts: Bosch magneto; Joes reverse gear; Atwater Kent; Zenith or Schebler carburetor. And it is the lowest priced, complete 4-cylinder motor of its size in America. An engine that will give you 1½ to 2 m.p.h. more speed, with less cost, less weight and longer life.

Put the Power of Niagara in Your Boat

Other models 5 H.P. to 120 H.P.

Write for details (state size of boat and H.P. interested in).

NIAGARA MOTORS CORP.
Box 300, Dunkirk, N. Y., U. S. A.



Patents Pending

The New

GROCO OIL COOLER

There are more Groco Oil Coolers sold in the marine field than all the rest combined.

Gross Mechanical Laboratories
1705 WEST BALTIMORE STREET
BALTIMORE, MARYLAND

Rampant, A Novel Runabout

(Continued from page 51)

at station No. 7 having the same crown as the forward beams, 1½ inch in 5 feet. But going aft the crown increases to 5 inches at station 9 and then drops off to the stern. The deck beams will be fastened to the shelf with small diameter brass screws 3 inches long, and into the top of the frames, that is, every other deck beam, with a galvanized iron boat nail.

The deck will be laid with 5/16 inch white cedar having battens under the seams in the same manner as the planking on the top sides.

The engine bearers extend from station 7 to station 10 and are fastened to the floor timbers with small metal angles as shown.

Through bolts will be used into frames No. 8 and 9. Then there must be two knees each side on frames No. 8 and 9. The latter to prevent side play. Use 1¾-inch spruce for the bearers and bolt inside these the 1½ by 3-inch oak bed as shown.

The flooring in the cockpit will be ¼-inch plywood well fastened with brass screws. The cockpit coaming will be made from ⅜-inch mahogany.

Figures No. 1 and 2 show the details of the rudder and strut and these should be followed out carefully. For steering I rather like the old fashioned quadrant and flexible wire tiller lines and slanting wheel post; but the positive gear steering gears now on the market are excellent devices and can be depended upon to give every satisfaction. There is a lot to be said for a vertical wheel post, too, and many of my designs in the past show this type.

By using one of the adjustable shaft logs and stuffing boxes now furnished a lot of work is eliminated and the chances of trouble in this part of the boat is reduced to a minimum. You will notice that the shaft diameter is kept to 1 in., this is ample as the shaft is made from Everdur bronze and is used in connection with a motor of not more than 100 h.p., turning at 1,800

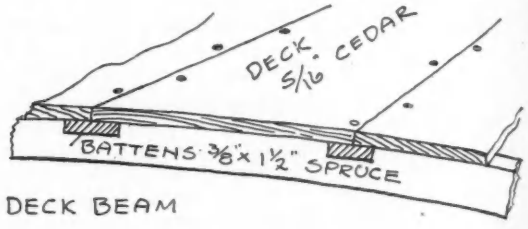


FIGURE 7

Detail of the deck construction

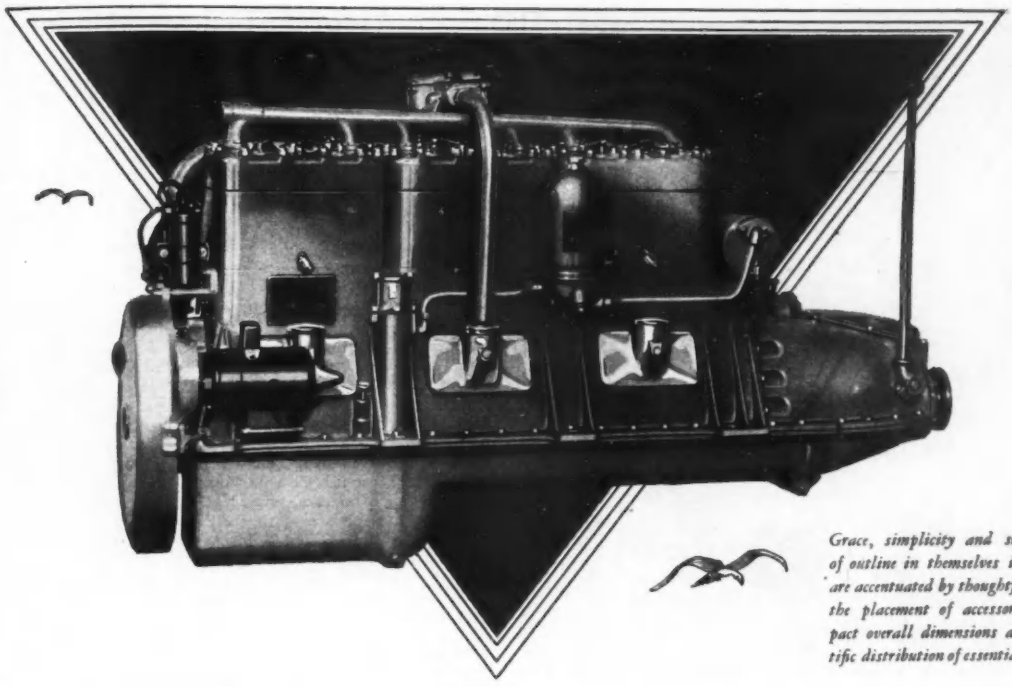
r.p.m. The smaller the shaft the less resistance there will be, because everything in connection with it can be less bulky; take, for instance, the strut or the propeller hub.

Rampant can be built complete with six-cylinder engine, cushions, spray hood, night cover, anchor, lights, everything required for use for approximately $1,800. This is considering the building of but one hull; of course, if boats of this kind were put up on a production basis the cost should be much less than this figure.

About painting: I notice here on salt water that runabouts that arrive here new are always varnished. These all too soon become shabby and the cost of keeping up the varnish is rather more than it should be. By the second year the boats turn up in paint and in all due respect to the builders I think the things painted white are far more pleasing than when varnished, and they absolutely do keep better. So I would suggest that this runabout Rampant be painted with yacht white on the top sides, a good anti-fouling red on the bottom and buff on the deck. Nothing like paint for use on boats.

Those who contemplate building Rampant can secure many useful books on design and construction, as well as blueprint copies of the designer's drawings to a scale of ¾-inch to the foot at moderate cost, write the Editor of MoToR Boating, 959 Eighth Ave., New York, N. Y.

Advertising index will be found on 3rd last page



Grace, simplicity and smoothness of outline in themselves impressive are accentuated by thoughtfulness in the placement of accessories, compact overall dimensions and scientific distribution of essential weight.

The PIONEER . . . .

who persistently points the way

IN EVERY FIELD OF ENDEAVOR there is always *one* who consistently stands forth as the pioneer—who with initiative and courage born of determination to excel forever seeks and points the better way.

The path of the marine engine industry almost from its inception is marked with outstanding beacons erected by SCRIPPS, by which others have since laid their course.

The "all enclosed" motor, the electric starter as standard equipment, the light alloy reciprocating parts are but a few of the outstanding developments sponsored by SCRIPPS which are now accepted practices of the industry.

Today Scripps leadership in the field of advanced engineering is again emphasized in the successful application of true down-draft carburetion, a development destined to leave its impression on the automotive industry as a whole. Down-draft carburetion imparts to SCRIPPS motors—power, ease of starting, flexibility and acceleration heretofore unattained.

A fully illustrated 32-page catalogue describing all SCRIPPS models will be sent on request

Ten models—15 to 200 Horse Power. High speed and medium duty.

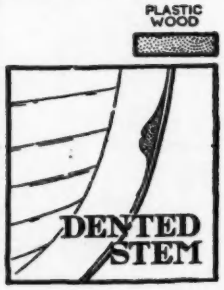
SCRIPPS MOTOR COMPANY, 5819 LINCOLN AVE., DETROIT, MICHIGAN

SCRIPPS

• THE MOTOR THAT CROSSED THE ATLANTIC •

We show above various sizes of incandescent searchlights suitable for any style boat. Catalog I—Incandescent Searchlights. Catalog A—Arc Searchlights.

THE CARLISLE & FINCH CO.
261 E. Clifton Ave., Cincinnati, Ohio



for

DENTED STEMS

In smaller boats drive through behind the stem band with any suitable tool, and bend the band back into the proper curve. Fill the resultant cavity with Plastic Wood, pressing in from both sides at once. In larger boats, remove the stem band and drive in suitable copper wire nails at the edge of the stem and along the sides in order to strengthen the repair. Build up the space with layers of Plastic Wood, allowing each to dry. Build slightly above the surface, and when dry, plane down, and replace stem band.

PLASTIC WOOD

Reg. U.S. Pat. Off.

At Ship Chandlers, Hardware and Paint Stores

1 lb. can $1.00 **¼ lb. can 35 cts.**

Write our Engineering Dept. for free book on Plastic Wood for boat repairs, or for advice on any specific problem.

Addison-Leslie Co., 26 Bolivar St., Canton, Mass.

From the States to Alaska

(*Continued from page* 28)

used to be the nightmare of every captain that had to take his boat through here.

At the northern end of this channel we arrive at Petersburg, where all the racers have to stop and lay over until all of their sixteen-hour layover time is used up. This starts all boats over again on their handicap time for the final spurt to Juneau. Petersburg, by the way, is the home town of the famous Alaska shrimps, and while we were in this town the local Chamber of Commerce staged an impromptu shrimp banquet and we all ate shrimps until our capacity was reached and we regretfully had to refuse another helping.

We are off again on what promises to be the most exciting lap of the race and in the middle of the night which is the time for leaving for an eight-knot boat. The boats which were entered at seven, and seven and one-half knots, are already well out of sight. It had been planned that we should all arrive at Juneau to 12:00 Noon (Juneau time). There being no other boats entered at our speed, we start off by ourselves and once started we are continually straining our eyes to see if we can see any of the slower boats ahead of us, or any of the faster boats which would soon be coming along behind. We see several lights during the night but as there are numerous fishing craft in these waters, we are forced to wait until daybreak (about 2:00 A. M.) in order to identify the boats. We finally spot some of the boats that are ahead of us and later as the forenoon wears along, we are able to identify seven of our competitors, some ahead of us, and some behind. We found out later that one of the skippers had made an error in the speed at which his boat was entered and consequently was so far ahead of his schedule that he was ruled out completely and another of the entries had the misfortune of making an error in his course and running aground near Prince Rupert, B. C., necessitating dry docking for repairs to his hull and propellor.

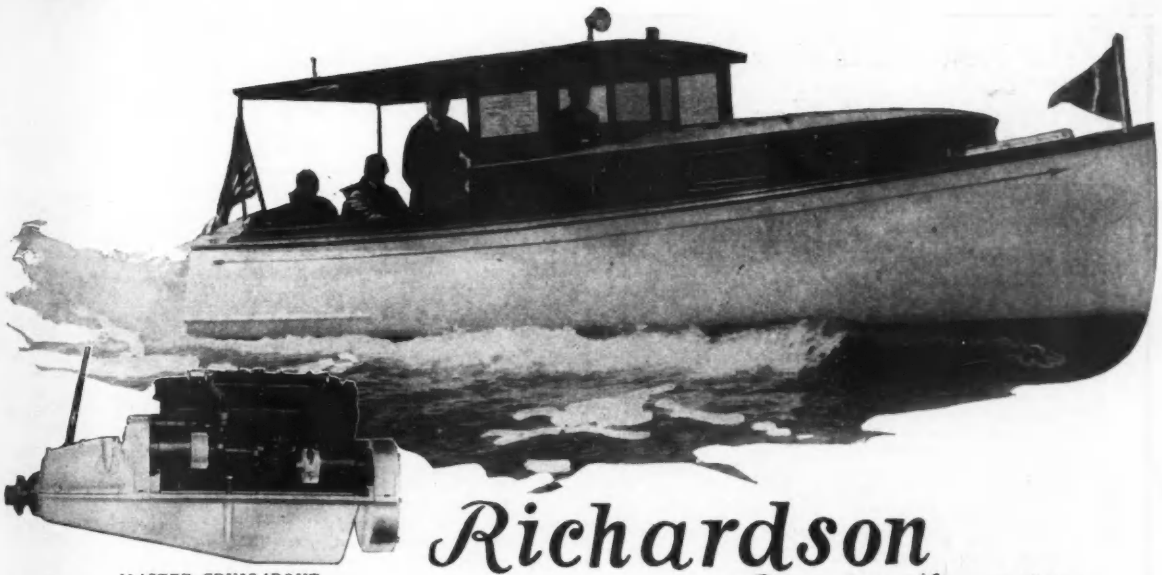
The distance between boats becomes less and less as 12:00 o'clock approaches and several of the boats cross the finish line within a few minutes of one another. Eight of the entries arrive inside of a half hour, much to the delight of a huge crowd of Juneau people who are standing on the docks and shores awaiting our arrival and as each boat crosses the finish line a bomb is fired and the time of arrival checked. Following is a list of the boats and their time of arrival:

No. 2. Klosh, Capt. W. G. Reed, 11:04:20 A. M.
No. 9. Mary-Mar-Ann, Capt. Frank Seidelhuber, 11:41:30 A. M.
No. 3. Kittiwake, Capt. Walter Draham, 11:41:34 A. M.
No. 4. Kayoia, Commodore George Briffett, 11:43:34 A. M.
No. 8. Winifred, Capt. Adolph Schmidt, 11:46:03 A. M.
No. 5. Jazz, Capt. Cash Cole, 11:53:56 A. M.
No. 6. Bolinder, Capt. Richard Froboese, 11:57:52 A. M.
No. 7. Blonde, Capt. Milton Henderson, 12:00:42 P. M.
No. 1. Maidie, Capt. Jack Powers, 12:10:04 P. M.

The actual race is finished and we turn our log books over to the race committee and the judges to be checked in order to determine the boat that adhered closest to their entered speed and their scheduled time at the differnt control points and consquently should be declared the winner in their class. Finally after the winners in each of the two classes was decided upon, the one of these two making the best record would be declared the winner of the Over-All prize.

While the judges are working on the log books the citizens of Juneau take the crews in hand and provide plenty of entertainment for our short stay in their city. The first thing on the program is a visit to the plant of the Alaska Juneau Gold Mining Company where we first take an incline railway up the hillside to the mine entrance. This railway consists of a small car on the end of a heavy cable with a hoisting engine at the top and furnishes all the thrills of a Coney Island roller coaster. We then start on our journey down the hill through the quartz mill which is the largest plant of its kind in the world. We see the cars of rock ore come out of the mine and pass into a special dumping arrangement where the whole car is held in a frame and turned completely over. From here the ore goes to the crushers and is then carried on endless belts past rows on rows of men who pick out the likely looking particles and allow the rest to pass on out to the dump. The pieces containing gold are then put through other crushers until they come out in a fine powder which passes through special washing devices known as riffle boards where the gold dust accumulates and allows the remainder to flow out the sluice-way and down to the channel where they are constructing a breakwater for the harbor of Juneau with the waste rock and sand from this plant.

(*Continued on page* 122)



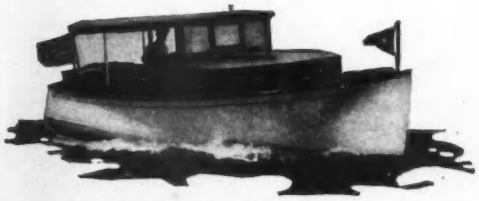
MASTER CRUISABOUT
The Master Cruisabout slips through the water at 13 miles an hour, an economical cruising speed.

Richardson Cruisabouts

ARE NOW POWERED WITH

GRAY 6-40/60 MOTORS

DAY CRUISABOUT
Eight cylinders, 110 H. P. move the Day Cruisabout along at 18 miles an hour.



FORE and AFT CABIN CRUISABOUT
The Fore and Aft Cabin Cruisabout is powered with a Gray 6-60 and, like her sister ship the Master Cruisabout, does 13 miles an hour.

MORE speed to get there and back—more power to buck the wind and waves are now available to the purchasers of Richardson Master and Fore and Aft Cabin Cruisabouts.

Large scale production, increased buying power of the Richardson Boat Company make possible the new six cylinder 60 H.P. Gray Marine Motor (instead of the 40 H. P.) at no increase in the purchase price of these dandy, little ships.

Abundant, smooth, steady, silent dependable six cylinder power is just one of the many features you will admire in the Richardson Cruisabouts. You'll revel in, and like, the roomy cabin, the easy-to-cook-in galley, the large, loungey cockpit, the pilot-ability and the seaworthiness of this greatest of all 28 foot water craft.

The Richardson Cruisabout Booklet E tells about and illustrates the many points of superiority of the three Cruisabout models. We'll be glad to mail a copy on receipt of your name and address.

RICHARDSON BOAT COMPANY, INC.
354 Sweeney Street, North Tonawanda, N. Y.

Cruisabouts are displayed by

Bruns, Kimball & Co.
Fifth Ave. & 15th St.
New York City

Bruns, Kimball & Co.
102 So. Fourth St.
Philadelphia, Pa.

Belle Isle Boat & Eng. Co.
8777 Jefferson Ave.
Detroit, Mich.

A. M. Deering
1454 Builders Bldg.
Chicago, Ill.

Washington Motorboat Sales Agency
1344 Connecticut Av. N.W.
Washington, D. C.

Walter H. Moreton Corp.
1043 Commonwealth Ave.
Boston, Mass.

Electric Supply Co.
210 21st Street
Galveston, Texas

Volney E. Lacey
Charlotte Sta.
Rochester, N. Y.

F. D. Homan
78 Riverside Ave.
Amityville, L. I.

Richardson Cruisabouts

The Newest Member of the
DYER MOTORCRAFT Family

"Protest"—a spectacular speed cruiser, the first of a fleet of 38-foot, twin screw express commuters.

This yacht is built of the special patent construction used in all Dyer Motorcraft. It has the greatest strength per material weight known to naval science and is particularly suited for fast work in rough water.

Watch for further announcements in September issues.

DYER MOTORCRAFT CORPORATION
EAST GREENWICH, RHODE ISLAND

The World's Best Built Boat.

Universal

"RENE"
Owner, A. P. Sloane
"NENEMOOSHA"
Owner, Alfred I. DuPont
"CIGARETTE"
Owner,
Gordon Hammersley
"NARASINGH"
Owner, The King of Siam
"PEARY"
Owner,
Com. Donald E. MacMillen
"WASP"
Owner, Wm. Wrigley, Jr.
"GYPSY"
Owner, Hal Roach
USMV "Siwash"
USLS "Portland"

WHERE
ONLY
THE BEST
IS
GOOD ENOUGH

These are just a few of the well known cruisers and yachts which are equipped with Universal Lighting Plants. When you're looking for absolute dependability, smooth operation, and steady current, you can find it in a Universal.

UNIVERSAL MOTOR COMPANY MBG-8
Oshkosh, Wisconsin

UNIVERSAL
ELECTRIC PLANTS
1½ - 2½ - 4 - 7½ - 10 - 12½ KW

From the States to Alaska

(*Continued from page* 120)

to Mendenhall Glacier, which is twenty miles north of the city. Words fail to describe the beautiful site before us when we drive nearly up to the face of the glacier in the cars. On our return we go by way of Auk Lake which makes a beautiful picture with the glacier in the background.

We now come to the exciting moment. It is Saturday night and we have just finished a sumptuous repast at a banquet given by the Juneau Shrine Club, in honor of the visiting yachtsmen, where we have been informed that the judges will announce their decision as to the winner of the race at a dance to be given later in the evening.

Bolinder, owned by Richard Froboese of Seattle, is announced as the winner of the Over-All Prize and also the winner of the first place in the first division which is for boats from 25 to 40 feet in length. She is also awarded the night glasses put up by the Seattle Yacht Club for the longest non-stop run. Mary-Mar-Ann is announced as the winner of first place in the second division which is for boats from 40 to 65 feet and also the winner of the best performance prize, which includes the appearance and condition of the boats at the start and at the finish, together with all equipment. Kittiwake of Olympia was awarded a special prize of 100 gallons of gasoline for adhering the closest to a log previously prepared and submitted to the committee. Kayoia of Olympia took second place in the first division while the third place went to Klosh of Seattle.

Second place in the second division was awarded to Maidie of Seattle, while the third place went to Blonde of Portland. Klosh, although disqualified in the race, was awarded a marine painting by Sidney Lawrence as a special prize for being the first boat to reach Juneau. Jazz of Juneau and Maidie also received a special prize of a framed enlargement of Auk Lake and Mendenhall Glacier.

Following is a list of the boats entered and their crews:

No. 1. Maidie, Jack W. Powers, Queen City Yacht Club, Seattle, owner and captain; length, 44.6 feet; speed, 7 knots. Crew: Murray Mitchell and Prof. Louis P. Devries of the University of Washington, Seattle, Robert C. Knowles, Medina, and Chas. H. Smith, Pasadena, Cal.

No. 2. Klosh, W. G. Reed, Shelton, owner and skipper; flying the colors of the Seattle Yacht Club; length 35 feet; speed 7 knots. Crew: H. W. Yenawine, Seattle; R. A. Briggs, Shelton; J. H. Griffin, Jr., Los Angeles, and T. Reed Ingham, Olympia.

No. 3. Kittiwake, Walter H. Draham, Olympia Yacht Club, owner and skipper; length 40 feet; speed 7.5 knots. Crew: Mrs. Walter H. Draham, Jack Mifflin and Harvey Kyllonen, all of Olympia.

No. 4. Kayoia, Commodore George Briffett, Olympia Yacht Club, owner and captain; length 40 feet; speed 7.5 knots. Crew: Harry Mills, Clarence Bethel, John McCaughen, Walter Gunstone, Walter Helander, George Briffett, Jr., and A. G. Johnson, all of Olympia.

No. 5. Jazz, Cash Cole, Juneau Yacht Club, owner and captain; length 43 feet 8 inches; speed 7.5 knots. Crew: Mrs. Cash Cole, Tom, Jim and Jerry Cole, Elliott Fremming, and Jim Chase.

No. 6. Bolinder, Richard Froboese, owner and skipper, Seattle Yacht Club; length 32 feet 5 inches; speed 8 knots. Crew: Oran W. Rice, Roy A. Palm, George G. Gaukroger and Harold E. Springer, Seattle.

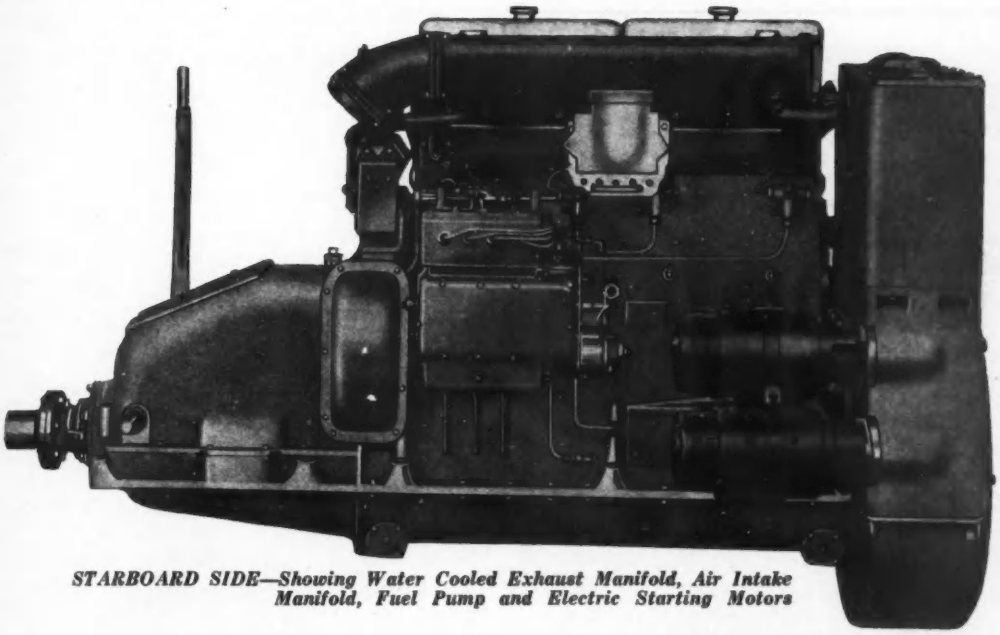
No. 7. Blonde, Milton B. Henderson, Portland Yacht Club, captain and owner; length 55 feet; speed 8.13 knots. Crew: Fillmore Henderson, Richard Jameson, Carl H. Johnston, all of Portland and Raymond Krantz, associate editor of Pacific-Motor Boating, Seattle.

No. 8. Winifred, Adolph D. Schmidt, Olympia Yacht Club, owner and captain; length 40 feet; speed 8.5 knots. Crew: Adolph D. Schmidt Jr., Charles E. Fullerton, Joseph Speckart, all of Olympia; W. Anderson, Bellingham and H. L. Dickey, New York.

No. 9. Mary-Mar-Ann, Frank J. Seidelhuber, Seattle Yacht Club, owner and captain; length 47 feet; speed, 9 knots. Crew: Mrs. Frank J. Seidelhuber, Frank V. Seidelhuber, Mr. and Mrs. Roy C. Erickson, Mr. and Mrs. Robert Brown, William Jefferson, Henry R. Seidelhuber, Anna Seidelhuber and Iola Brown, all of Seattle.

No. 10. Marlin, H. J. Thurling, St. Francis Yacht Club, San Francisco, Calif., owner and captain; length 47 feet; speed 9 knots. Crew: Mr. and Mrs. Frank Hartinelli, Mr. and Mrs. Fred Newcomb, W. A. Wilson and an engine boy.

Advertising index will be found on 3rd last page



STARBOARD SIDE—Showing Water Cooled Exhaust Manifold, Air Intake Manifold, Fuel Pump and Electric Starting Motors

A High Speed, Light Weight Diesel

100 H.P. at 1000 R.P.M.

The Buda-M.A.N. Marine Diesel engine is of the four-stroke-cycle type with small space requirements. Its flexibility of control and low fuel consumption appeals to those interested in utmost economy and dependable operation.

This engine is a full Diesel, solid injection, and can be operated as easily as a gasoline engine. Electric starting motors are furnished as regular equipment.

Ask for bulletin No. 673 which gives complete information together with mounting dimensions.

DISTRIBUTORS AND DEALERS

NEW YORK, N. Y.
Bowler, Holmes & Hecker Co.
259 Greenwich Street

BOSTON, MASS.
Rapp-Huckins Company, Inc.
59 Haverhill St.

ANNAPOLIS, MD.
Chance Marine Constr. Co.

PHILADELPHIA, PA.
Johnson & Towers, 126 Arch Street

RALEIGH, N. C.
Automotive Equipment Co.

HOUSTON, TEX.
Peden Iron & Steel Co.

NEW ORLEANS, LA.
Higgins Industries

CHICAGO, ILL.
Buda Engine Service Co.
2419 Indiana Avenue

SEATTLE, WASH.
Richard Froboese Co., 83 Marion Street

CALIFORNIA
William Sylva Co.
111 Mission St., San Francisco
Ets-Hokin & Galvan, 218 Avalon Blvd., Wilmington

FLORIDA
H. E. Caulfield, St. Petersburg
Forrest E. Johnson, Cocoanut Grove
Chas. E. Sands Co., Fort Pierce
Marshall Boat Co., Pensacola
Matthews Boat Co., Daytona
Gibbs Boat & Engine Co., Jacksonville

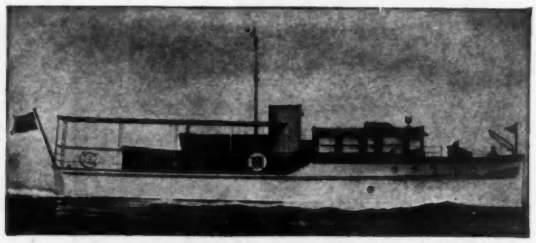
Branch Offices:

30 CHURCH STREET - - - - - - - - NEW YORK, N. Y.
664 MISSION STREET - - - - - - - SAN FRANCISCO, CAL.

THE BUDA COMPANY, HARVEY, { CHICAGO SUBURB } ILLINOIS

ESTABLISHED 1881

BUDA MARINE POWER



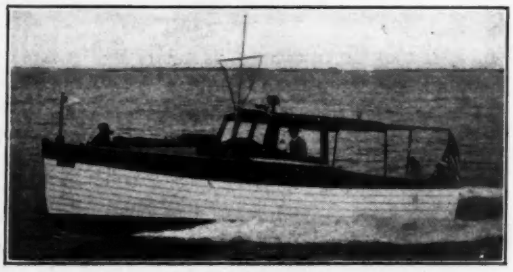
Townsend Fifty-Foot Cruiser
Powered with two six-cylinder 75 H.P.

HILL DIESEL ENGINES

These engines meet the requirements of exacting yachtsmen. No smoke or fumes, no fire hazard, no vibration. They operate on Diesel fuel oil 24° Baume or lighter and burn the fuel clean. Equipped with electric starter which also furnishes current for lights.

Fully described in Bulletin No. 60

HILL DIESEL ENGINE COMPANY
LANSING, MICHIGAN
Builders of Internal Combustion Engines Since 1 99



Banfield Thirty-two Foot Sea Skiff Cruiser

PHILIPPINE MAHOGANY
supplied by
BLACK & YATES, Inc.
is used for planking by the builders of

BANFIELD SEA SKIFFS

We are in a position to supply other builders specially selected sizes of *clear Philippine Mahogany* in widths and lengths required.

Over 2,000,000 feet of dry lumber at our Brooklyn, N. Y., yard for immediate delivery.

BLACK & YATES, Inc.
Paramount Building, Times Square, New York
Tel. Longacre 1345

YARD AND SHOP

(Continued from page 74)

TOPPAN LIKES EVERDUR SCREWS

Boat builders who build for long service and satisfaction recognize that the fastenings are one of the most vital factors in construction. No matter how sound the planking, nor how well caulked she may be, if the fastenings are of inferior quality and let go under strain, your boat suddenly becomes a sieve.

Because of this importance, many of the foremost builders are now using Everdur screws for fastenings and find them much more desirable and satisfactory than screws of brass or other special compositions. These screws will penetrate the hardest woods.

Everdur screws, made of a copper, silicon, manganese alloy, produced by the American Brass Company, manufacturers of the famous Tobin Bronze Shafting, possess the strength of steel and great resistance to corrosion.

H. M. Lewis, vice president and general manager of the Toppan Boat and Engine Company, has registered his unqualified satisfaction with Everdur screws by stating that in the many years that the Toppan Company has been building, they have never found a product more ideally suited for small boat construction.

Walter H. Moreton, who is to act as the Boston distributor for Kermath marine engines

SEDANS POPULAR AT THOUSAND ISLANDS

The closed runabout or Sedan was introduced by Gar Wood in 1927, made up particularly for the people at the Thousand Islands. The advantage of the closed speed boat is now seen by many others and used in many places. Other boat companies offered them on stock runabouts in 1928.

Alfred Severn Bourne of New York, the Thousand Islands and Morningside, Ga., has purchased two forty-mile Baby Gar Sedans which he will use at his estate, just purchased in the Thousand Islands this year, near Alexandria Bay. He is the son of the late Comm. George K. Bourne. In the Islands, they use these boats exactly the same as they use their closed cars in the city. Milady advises her boatmen to have the boat at the dock at a certain hour to go to tea, at a friend's house on another island, or to the country club, yacht club, polo field or the casino. These boats are also used by the owners and their guests to drive to other islands for formal dinner parties, dances and things of that kind and the majority of boats sold up there are of the Sedan type.

Gar Wood introduced last fall the Limousine, or Sedan de Luxe, which has two wind-up windows on either side, dome light, robe rails for evening wraps, two individual windshields, vanity case, ash receiver, etc. Many of these boats are being sold in the Islands this year.

(Continued on page 126)

Advertising index will be found on 3rd last page

The Dodge Boat Works Use Lycoming 8-In-Line Marine Engines as Standard in Their 26-Foot Runabout

Nothing *Finer* Can Be Said of Any Motor Boat Than, It is -

LYCOMING MOTORS

LYCOMING MANUFACTURING CO.
WILLIAMSPORT, PENNSYLVANIA

Lycoming Marine Engines are also Available to the Retail Trade

COURTESY GAR WOOD, INC.

follow the fastest boats with the finest glasses

Here they come, roaring 93 miles an hour in a cloud of flying spray ... Your pulse quickens as you follow them with a Zeiss ... And no matter how fast they leap, your *wide-angle* Zeiss won't miss a single thrill. Ask your dealer to show you one or write for catalogue T-380.

Carl Zeiss, Inc., 485 Fifth Avenue, New York
728 So. Hill Street, Los Angeles

CARL ZEISS
BINOCULARS

CARL ZEISS JENA

England and America Race for Harmsworth Trophy at Detroit

And Detroit will be the scene of the year's most spectacular motor boat races held in the world—August 31, September 1 and 2. The Main Sheet will provide an elaborate but very inexpensive advertising medium to those who would reach the largest boat buying market in America and thousands of boating enthusiasts besides in its Official Program Number.

Make your space reservations today. Rates on application. Forms close August 10th.

The Main Sheet

W. D. EDENBURN

5-216 General Motors Building **Detroit, Mich.**

YARD AND SHOP

(*Continued from page* 124)

BIG PROGRAM AT DETROIT AUG. 31-SEPT. 3

Detroit's 13th Annual International Regatta, August 31-Sept. 3, will be featured by the fifteenth race for the British International Trophy, but in addition to the Harmsworth it will also have the Field International Trophy, for outboard boats, given by Sir Leicester and Mr. Harold Harmsworth, relatives of the late Lord Northcliffe. The latter was Sir Alfred Harmsworth, when he gave the B. I. T. back in 1902.

This new international trophy for the most popular class of speed craft was put into competition this year. It will be competed for in all the countries holding membership in the International Motor Yachting Union, from present indications, and is a different type of contest than that with which the outboard pilots of North America are familiar. It is for a distance of 12 nautical, not statute miles. It is run over a mile straightaway course, six times with the current and six times against the current. It is open to outboard engines of not to exceed 1,000 cubic centimetres piston displacement, which is the equivalent of 61 cubic inches, or under the American rules, any engine from Class F and under is eligible.

The Field Trophy will be run on Tuesday, Sept. 3, the day on which record runs for international marks are conducted by the Yachtsmen's Association of America. Unless six boats start the event can not be accepted internationally, and it is expected that three or four boats will be necessary. Although only 12 miles count in the distance, time is taken at the start and no allowances made for the time lost in turning at the ends of the course, which puts a premium on the ability of the pilot to maneuver his boat and not lose too much speed.

The trophy is awarded to the national authority of the victorious country after the close of the season and it in turn hands the trophy to the club the owner represents. The trophy must be surrendered next season, but the winning and the second place clubs are both presented with plaques. The national authority in this country is the Yachtsmen's Association of America.

Like all the big regattas of North America, this year the outboard will have the spotlight at Detroit. In addition to the Field Trophy there will be a heat each of the first three days of the regatta for both Division 1 and 2 drivers, in Classes A, B and C, making six outboard events daily. On Sunday of the regatta there will be a free-for-all for Division 2 and 3 pilots. All heats and races will be five statute miles.

The Detroit regatta will also have a special handicap race for stock runabout owners, in which all factory boats and boats piloted by factory employees are barred. The first heat on the opening day of the regatta is expected to draw from 50 to 75 boats. All will start together without handicap allowance and the first heat will be 10 laps of the two and one-half statute mile course, with the distances for the Sunday and Monday heats to be announced later. With such a large field in prospect the start will be paced with the boats in ranks of five and the time taken when the boat crosses the line. There will be five scratch races for stock runabouts during the three days, the classes being the same as those at Newport, R. I., and the Gold Cup regatta at Red Bank, in which it is expected that the boats in the handicap will also compete.

The annual cruiser handicap of the Detroit River, the Kermath Trophy, will also run each of the three days, with varying distances for each heat to total 75 nautical miles. It is expected that more than 40 cruisers will compete for this trophy. There will also be the annual chance races for stock cruisers on Sunday, with events already assured for the Matthews and Liggett families of stock boats.

Commodore Garfield A. Wood will for the fourth time since he won the British International Trophy at Cowes, in 1920, defend his honors on the Detroit River, in 30 nautical mile races and Saturday and Monday, with Miss M. B. Carstairs, of England, as the challenger. Miss Carstairs was here last year with Estelle II and is coming back with a much larger hydroplane, packed with three Napier-Lyon 1,000 h.p. engines, which reports say will give her a 100-mile-an-hour boat. Commodore Wood is now reconditioning Miss America VII, which holds a straightaway world's record of 92.862 m.p.h. and is building a new and more powerful Miss America VIII. Miss America VII is powered with two 12-cylinder Packard engines, rated at 1,100 h.p. each. A third boat in the United States team comes from Los Angeles. This is a new and large single step hydroplane powered with two 24-cylinder W type Miller engines. It has three banks of eight cylinders for each engine and its cylinders are the size of the Liberty engine, which should give the boat enormous power. She is owned by Commodore James Talbot, Jr., and will be piloted by Ralph Snoddy.

(*Continued on page* 128)

Advertising index will be found on 3rd last page

KELVIN & WILFRID O. WHITE CO.

112 State Street
BOSTON

38 Water Street
NEW YORK CITY

The Port of High Quality
NAUTICAL INSTRUMENTS

SHIP BELL CLOCKS
BAROMETERS
BAROGRAPHS
Coast Survey and Hydrographic Office Publications

MARINE GLASSES
CHRONOMETERS
SEXTANTS
Eldridge Books of Harbor Charts
Send Today for Circulars

DECK PLATE COMPASSES
In 4", 5", 6" and 7" sizes. Complete, ready to install.

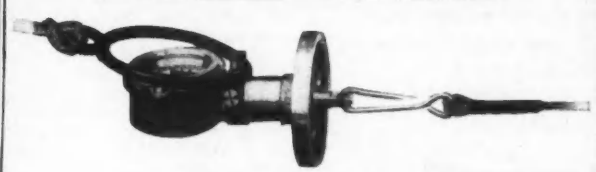
CORRECTOR BINNACLES
5" and 6" compasses, by which you can adjust or correct your own compass.

NEW HELMET HEAD
MOTOR BOAT BINNACLE
With 5" compass, fitted with electric lights; also with our patent spring suspension for fast yachts.

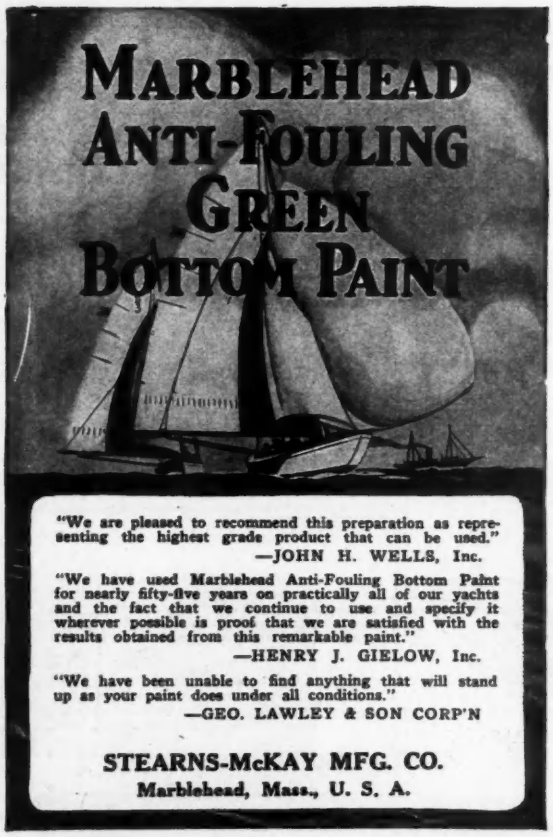
OUR BRASS SHELF BINNACLE
5" to 8" compasses. Sighting lines, bow and beam bearings.

BRASS MOTOR BOAT
BINNACLES
With 4" and 5" compasses. Solid, practical, good looking. Oil and electric lights. Heavy brasswork. Top removable.

MOTOR BOAT
BINNACLE COMPASS
4" card in liquid, magnified to 5½". Neat, serviceable, ornamental for smart runabouts.



Agents for Walker
Ship and Yacht Taffrail Logs

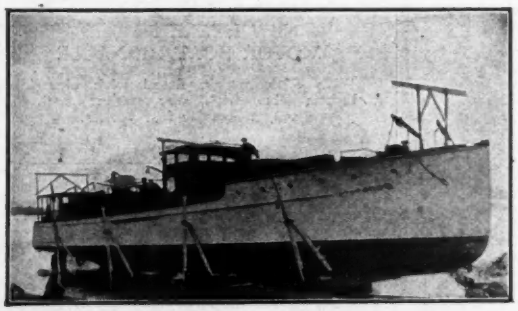


"We are pleased to recommend this preparation as representing the highest grade product that can be used."
—JOHN H. WELLS, Inc.

"We have used Marblehead Anti-Fouling Bottom Paint for nearly fifty-five years on practically all of our yachts and the fact that we continue to use and specify it wherever possible is proof that we are satisfied with the results obtained from this remarkable paint."
—HENRY J. GIELOW, Inc.

"We have been unable to find anything that will stand up as your paint does under all conditions."
—GEO. LAWLEY & SON CORP'N

STEARNS-McKAY MFG. CO.
Marblehead, Mass., U. S. A.



Efficient Railway Equipment

is a vital factor in the successful operation of any boat yard. Is yours entirely adequate for your present and future requirements?

As Agents for
THE CRANDALL ENGINEERING CO. OF BOSTON, MASS.
we should be glad to tell you about the new CRANDALL STANDARDIZED YACHT RAILWAY, or quote you our material for new installation, replacements and repairs.

W. & J. TIEBOUT
NEW YORK
118 CHAMBERS ST.
MARINE HARDWARE AND EQUIPMENT
118 CHAMBERS STREET

YARD AND SHOP

(*Continued from page* 126)

INTERNATIONAL MOTOR BOAT RACES AT VENICE

A series of motor boat races will be held in Venice September 2-15, 1929, under the auspices of the Committee for the International Motor Boat Competition of Venice, and in order to encourage the entry of American boats in these races the Committee offers the following special facilities for motor boats owned in the United States:

TRANSPORTATION: Arrangements have been made for free transportation of all classes of boats regularly entered in any race from New York to Venice and return on the vessels of the Cosulich Line on condition that the owners of the boats and their mechanics take passage on the vessels of that line.

CUSTOMS COURTESIES: All boats, together with supplies and accessories, will be exempted from all customs duties and bonding requirements, and this exemption covers a period of three months after the conclusion of the races.

DOCKING FACILITIES: The Committee will supply to the boats entered in the races free docking facilities in the Navy yard in Venice, where two large drydocks supplied with electric cranes, together with a covered repair wharf, have been placed at the disposal of the Committee. The free use of the repair shop of the Royal Navy Arsenal will also be at the disposal of the owners of the boats entered in the races.

RAILWAY TRANSPORTATION: The Italian Railway administration has granted to the Committee a reduction of 50 per cent on the transportation of motor boats, entered regularly in the races, to Venice and return from any place in Italy, and these terms apply also to accessories and supplies accompanying the boats. Freight cars carrying the motor boats will be transported by ferry from the Central Station in Venice to the Arsenal of the Royal Navy, where they will be unloaded by crane.

SUPPLIES: The Committee is negotiating with the most important oil companies with a view to obtaining a reduction in the price of oil and gasolene for the benefit of the owners of the boats.

HOTEL RATES: The hotels and pensions in Venice will offer special prices for the owners of the motor boats and their mechanics, and these prices will be published in the near future.

ENTRIES: American motor boats owners may enter their boats in the United States and communications in this connection should be addressed to Lee Barrett, Secretary and Treasurer of the Yachting Association of America, 1805 Stroh Building, Detroit, Michigan. Mr. Barrett is authorized to issue certificates of entry as well as documents entitling the owners to free transportation offered by the Cosulich Line. He will also be supplied with the final program of the races, and will be able to furnish any additional information relating thereto.

The Committee for the International Motor Boat Competition of Venice recognizes the superior position held by the United States in the manufacture and perfection of motor boats in general, and of day cruisers and runabouts in particular, and consequently is very eager to obtain the participation of owners of American made boats in the races referred to above. With this in view, the Committee has made every effort to facilitate the entry of boats from America and to offer every inducement for their participation.

The Committee hopes that the arrangements which have been made will bring to Venice a large quota of American motor boats.

CORRECT MARINE ENGINE LUBRICATION

Correct Lubrication for Motor Boat Engines—1929, is the title of an authoritative treatise issued recently by the Vacuum Oil Company. In addition to a discussion of correct lubrication, this booklet also contains some very valuable information on motor boat engine troubles. Besides miscellaneous difficulties, attention is devoted to ignition troubles, fuel supply difficulties, lubrication failures, cooling system troubles and poor compression.

Diesel engines and surface ignition oil engines are discussed and charts of recommendation are included for the correct lubrication of carbureter type motor boat engines for models built from 1926 to 1929, for outboard engines, universal joints and reverse gears.

Miscellaneous navigation and equipment information, storm signals and the flags of the International Signal Code prove invaluable to owners of craft of all sizes.

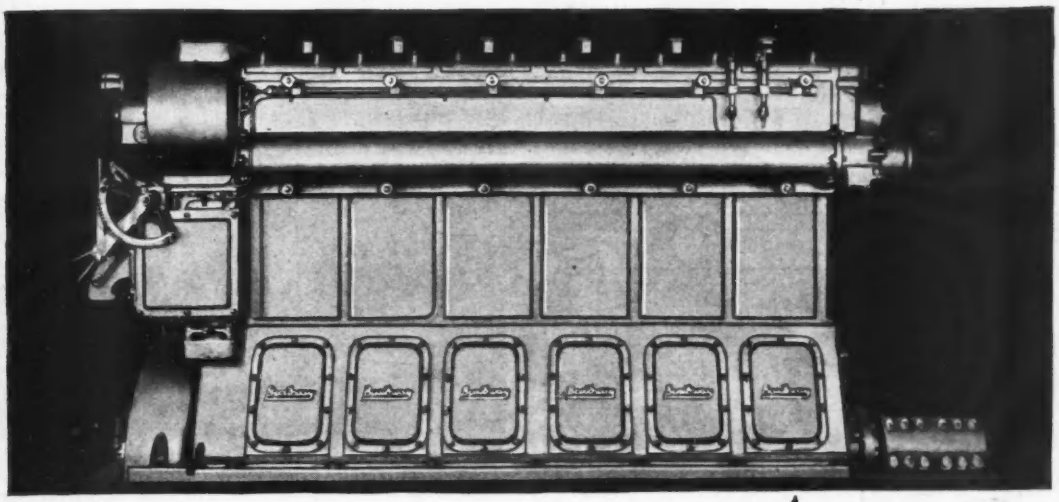
Copies of the book may be obtained without obligation by writing directly to the Marine Sales Department, Vacuum Oil Company, 61 Broadway, New York City.

(*Continued on page* 130)

Speedway

Diesel Engine

simple, powerful, economical—the supreme marine power plant.



SMOOTH, effortless, speed-producing power flows from this widely-acclaimed, Consolidated-built marine motor. And years of trustworthy performance in many of the finest craft afloat have attested its sturdiness and endurance.

The Speedway Diesel is truly a masterpiece of simplicity and efficiency. It is of light weight, accessible, and operates with remarkable economy—the result of advanced design achieved through years of research and experience.

Our marine engineers will gladly consult with you on any problem you may have regarding the construction or powering of watercraft. No obligation is involved.

Consolidated Shipbuilding Corp.

Morris Heights **NEW YORK**

Clean Your Boat, Inside and Out, With Sudsy-Action
SILVER SUDS

The result of 33 years' experience in the manufacture of cleaning preparations, Silver Suds Marine Cleanser penetrates and dissolves dirt by an exclusive sudsy action.

Silver Suds Marine Cleanser is prepared exclusively for the economical and safe *up-keep* of the yacht and not a violent scouring compound for paint-removing purposes. It is an excellent hand soap—instantly removes engine room grease—and harmless to the skin.

USE SILVER SUDS FOR THE HULL
1 and 5 gallon wooden pails at $2.00 & $7.50. Send 50c for trial pail

SILVER SUDS
Marine Cleanser

DEALERS AND DISTRIBUTORS WANTED — SILVER SUDS MFG. CO., Philadelphia, Pa.

TOPPING BROTHERS, New York Distributors
159 Varick Street, New York

No. 502X

No. 541

No. 547

No. 542

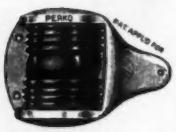
Offering the New "PERKO" Products

The new line of "PERKO" products offers the most practical and attractive designs in running lights, lighting fixtures and marine accessories. Lights have the re-bulbing feature, which is a Perkins patent.

Write for our New Booklet No. 48

Let "PERKO" be your Guarantee

Perkins Marine Lamp Corp.
1942 Pitkin Avenue
Brooklyn, N. Y.



No. 563

No. 559

No. 543

YARD AND SHOP

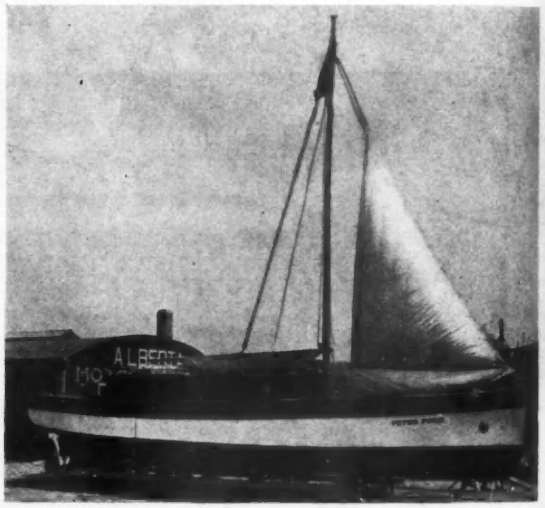
(*Continued from page* 128)

MOTORS IN THE NORTH MUST BE DEPENDABLE

Peter Pond is a new hospital ship, built by the Alberta Motor Boat Company of Edmonton, Alberta, for Dr. G. Bourget, of the Department of Indian Affairs, for the Dominion of Canada.

This boat will serve as a hospital ship and will also act in the capacity of paying treaty money to the Eskimos of the north. It is powered with a 35 to 40 h.p. B.E.F. Kermath four-cylinder marine engine. It is of nine tons displacement and reveals a very rugged, seaworthy design. Because these vessels are built miles from the nearest navigable water, they are hauled by teams and railway to the Coast.

There are a vary large number of Kermath marine engines employed in the various departments of the Canadian Government, where outstanding dependability and consistent performance are requisites. Quite frequently many of these boats—which are also in the service of the Northwest Mounted Police—are for months cut off from contact with civilization, and, in consequence, spare parts and service are quite unobtainable. Kermath, in the frozen north, is a byword among the natives and the officials who control the vast wilderness around the Arctic circle.



Peter Pond, recently built for the Canadian Government, is to be used as a hospital ship and will also carry treaty money to the Eskimos of the north

LIPTON DONATES PERPETUAL OUTBOARD TROPHY

The donation of a handsome $6,000 trophy by Sir Thomas Lipton, the English sportsman, to the Philadelphia Chamber of Commerce as a perpetual challenge cup, makes this city the center in this country for outboard motor boat racing and increases interest in the sport many times. It is the most classic and valuable trophy to be raced for anywhere in this country for outboard motor boats. Incidentally, it marks the first venture of the Irish baronet in this field of racing.

Possibility of making the regatta an international affair is now the topic of much discussion in the Philadelphia Outboard Regatta Association and the Philadelphia Chamber of Commerce, which bodies have joined hands in the formulation of plans for the classic.

That a prominent English outboard will be sent over here to compete for the cup, as Lipton's entry, and that the French outboard champion will be over, are believed to be more than hopes by the leaders in both bodies, and cablegrams and letters are going to and fro so rapidly as to make the chances of success of both sets of negotiations appear rather bright.

Although the regatta is still six weeks away, two Canadian entries have been received and American boats have been entered from scattered points, among them St. Petersburg, Fla., Detroit, Indianapolis, Boston, Chicago, Wheeling, San Francisco and many Eastern points.

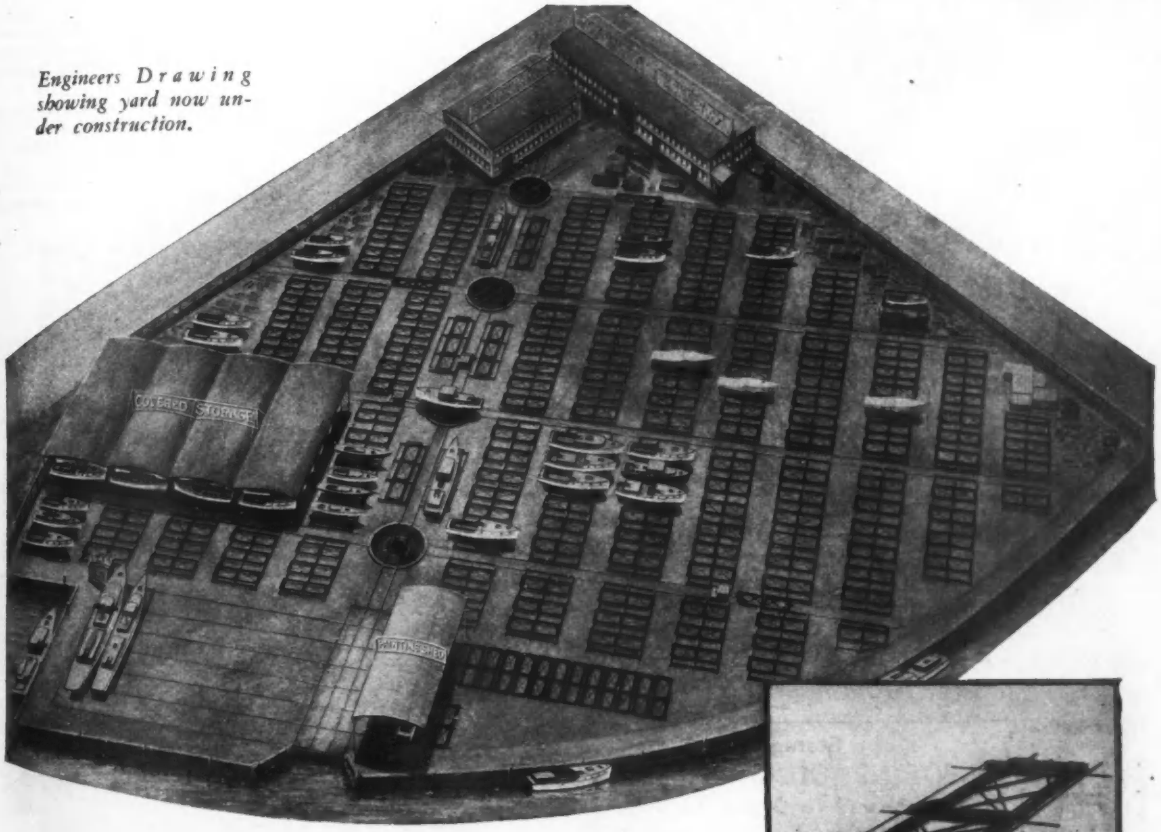
Last year the first race was held before the cup was made.

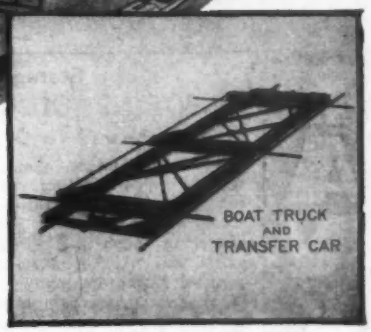
(*Continued on page* 132)

Advertising index will be found on 3rd last page

WE'LL PUT 'EM OVERBOARD NEXT SPRING
...on 24 hours notice

Engineers Drawing showing yard now under construction.





Every Boat Its Own Carriage

RIGHT in the heart of New York City, convenient for New Jersey, New York, Long Island and Connecticut yachtsmen, this Model Boat Storage Yard of over 12 acres will be in operation on September 1st. It will accommodate when completed 300 cruisers, 30 to 90 feet and about 100 runabouts; whose owners do care how their boats are handled.

EVERY BOAT WILL HAVE ITS OWN CARRIAGE. ELECTRIC ELEVATORS DO THE HAULING.

No racking of vessels when hauling them out and allowing them to stand on a strain all winter. The carriage has wheels that roll on steel rails. It goes under the boat as a hauling cradle and stays under her until she goes overboard again.

It will take us only two hours to put any boat in the yard overboard. A dozen owners may want their boats the same day, so we say "We'll put 'em overboard on 24 hours' notice."

Phone or write for full particulars.

We make our own

Copper Tanks
Canvas Work
Leather Work
Cabinet Work
Upholstery
Engine Repairs

New York Boat Service Corp.

Subsidiary of

DAWN BOAT CORPORATION

Clason Point, New York City **Telephone Westchester 7000**

Reservations for 1929-30 are now being booked.

SPEED

DOLPHIN
designed and built by the Hacker Boat Co.

with reliable Exides on the job

PLANING at high speed . . . or just loafing along . . . it makes no difference to your Exide Battery. These batteries, the result of 41 years of battery-building experience, are ruggedly built to function steadily and *dependably* under any conditions. An Exide has a long serviceable life—and the cost is unusually low. Before buying your next batteries, see the nearest Exide representative.

Exide

IRONCLAD MARINE BATTERIES

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia
Exide Batteries of Canada, Limited, Toronto

TANKS

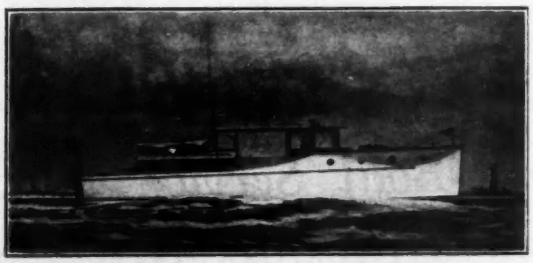
For Storage of
GASOLINE, OIL or WATER
Made to Order

No matter what your tank problem, we are ready to meet your requirements for special shaped tanks in galvanized steel, monel metal or copper. Our engineering department will be glad to assist you. Also a large supply of standardized tanks in many sizes carried in stock for prompt shipment.

RUDDERS, STACKS, SPECIAL WORK GALVANIZING

L. O. KOVEN & BROTHER
Incorporated
154 Ogden Avenue Jersey City, N. J.

MARYLAND BUILT CRUISERS



41 x 10'-8" x 2'-8"—Best construction, full equipment, Lux, Prutane, screens, searchlight.
SINGLE SCREW—$8700 TWIN SCREW $10,800

HOUSEBOAT CRUISERS
Able, comfortable, plain, heavy construction, Homelite, Lux, awning, screens, searchlight 50 x 14 x 3—$9950.

RALPH H. WILEY, M.E.
51 BENNETT AVE. ARLINGTON, N. J.

YARD AND SHOP

(*Continued from page* 130)

HELLMUTH BECOMES HACKER EXECUTIVE

Henry P. Hellmuth, whose entire business career has been spent in sales work in the marine field, recently became associated with the Hacker Boat Company as sales manager and secretary. He brings to this new work an almost inexhaustible fund of merchandising experience, as well as a technical training of a very high order.

From 1902 to 1908 Mr. Hellmuth was in the sales department of the Smalley Motor Company of Bay City. In the latter year he left to go with the Gray Marine Motor Company, of Detroit as export sales manager. The Scripps Motor Company requisitioned his services in 1915 as sales manager and as secretary and treasurer of the company, and he was with this company continuously until late in 1928.

Henry P. Hellmuth, Hacker's new Sales Manager and Secretary

At this time, due to the large expansion program inaugurated by C. P. McCready, vice-president of the Hacker Boat Company, a capable sales manager was required, and Henry Hellmuth was offered the task of establishing a larger dealer organization and expanding sales. Since this appointment Mr. Hellmuth has been made secretary of the Hacker organization, with John Hacker, president, C. P. McCready, vice-president, and S. D. McCready, treasurer.

The rapid developments which have recently occurred in the boat business have placed the Hacker Boat Company in an enviable position as one of the important builders of fast runabouts in the country. Since Mr. Hellmuth's recent appointment, an unusually large export business has been built up. This, added to the extremely large demand for Hackercraft in the East, and the prospects for greatly increased business in the Middle West, and on the Pacific Coast, makes further expansion of Hackercraft factory facilities inevitable.

F. B. CASWELL DIES

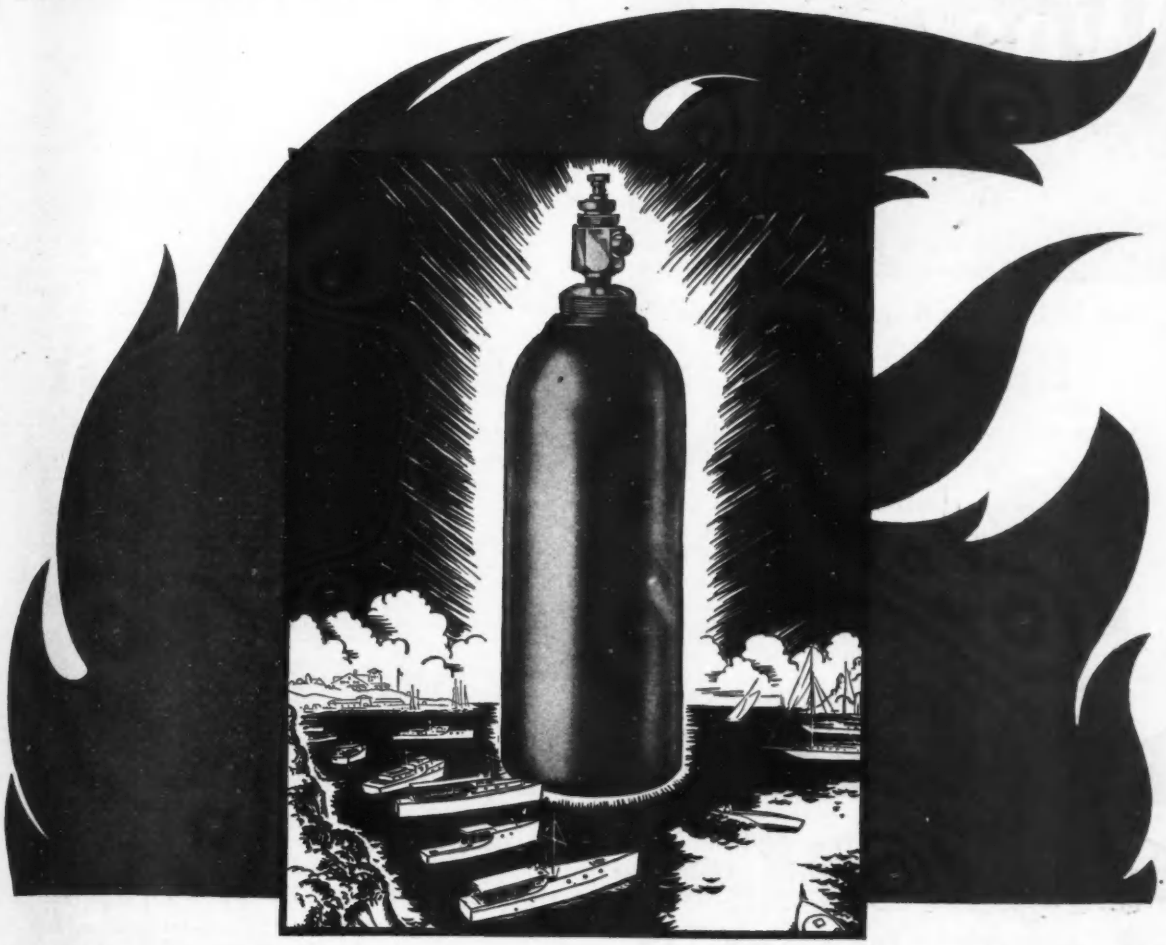
Fordyce B. Caswell, vice president and director of sales of the Champion Spark Plug Company since 1912, died suddenly in a Toledo hospital Friday night, June 14, from a heart attack following a minor operation. He was 61 years of age.

Mr. Caswell, one of the best known figures in the automotive field by reason of his long connection with the Champion company and his prominence in many of the industry's organizations, was regarded as one of the ablest and most aggressive sales managers in the country. Much of his time was spent traveling in the interests of his company and few automotive conventions for years have missed the sight of his familiar presence. Mr. Caswell is survived by his widow and one son, Walter C. Caswell, of New York.

(*Continued on page* 134)

Advertising index will be found on 3rd last page

KILL FIRE WHILE IT IS YOUNG



Fire's danger is ended— when ALFITE guards your boat

You never know when fire will pay you a visit! It may be when your boat is miles at sea—far from outside aid!

Will fire mean panic—hurried and ineffective attempts to smother it? Or will you reach for the control lever of your ALFITE System —*knowing* that the fire will be *out* in a few seconds?

The ALFITE System floods the fire space with fire-killing ALFITE Gas. It snuffs out fire just as simply as you snuff out a candle. It never fails. After the fire is out ordinary ventilation removes every trace of the gas, leaving nothing to clean up.

The system takes up very little space. The gas is stored in small steel cylinders, connected to danger points by fixed piping. A single simple valve seals positively against leakage—yet assures complete, rapid discharge.

The cost of the ALFITE System is moderate. If you would like complete information write for our booklet "One Fire is Too Many". American-La France and Foamite Corporation, Engineers and Manufacturers, Dept. S. 9, Elmira, N. Y.

AMERICAN-LA FRANCE AND FOAMITE PROTECTION

A Complete Engineering Service

For Extinguishing Fires

Mention MOTOR BOATING, *57th St. at Eighth Ave., New York*

WOOLSEY'S Paints & Varnishes

TRADE MARK

Quality Products Since 1853

You Will Surely Require Copper Paint

Buy the Best!

WOOLSEY'S Copper Paints, put up in Red, Brown, and Green, have been standards of excellence for the past 76 years. They give absolute protection against fouling either by seaweed, barnacles or other marine growth. It will pay you to use WOOLSEY'S.

Write today for Marine Paint Booklet—Free

C. A. WOOLSEY PAINT & COLOR CO
Jersey City New Jersey U.S.A.

B. Schellenberg & Sons

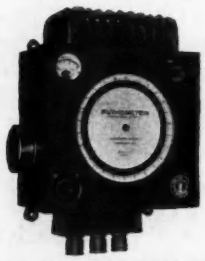
EVERYTHING FOR THE PERSON OF THE YACHTSMAN, HIS OFFICERS AND HIS CREW

Clubs, yacht owners, commercial boat owners should take advantage of our almost 70 years' experience in outfitting the mariner, both inland and deep sea.

Crews and Club attendants furnished without Charge

B. SCHELLENBERG & SONS
Established In 1857
99 to 105 Myrtle Avenue
(Near Bridge Street), Brooklyn, N. Y.
Telephone: Cumberland 0804

ECHO DEPTH SOUNDINGS BY SOUND



are made with the

Fathometer

Measurements of Water Depth beneath the Keel

—are—

ACCURATE VISUAL
INSTANTANEOUS
AUTOMATIC

FATHOMETER SOUNDINGS INSURE SAFE NAVIGATION

Submarine Signal Corporation

160 State Street, Boston, Massachusetts, U. S. A.

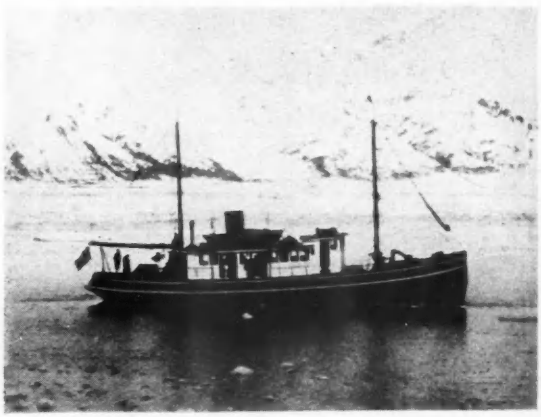
YARD AND SHOP

(*Continued from page* 132)

OF INTEREST TO YACHTS VISITING CUBA

The following ruling of the Cuban Treasury Department may be of interest to readers who contemplate visiting Cuba in their yachts:

"Custom housese are to keep special books to register the special permits issued by the Secretary of the Treasury for visiting yachts to enter and leave Cuban ports without complying with the regular customs requirements. These permits will be issued only when the boat is registered in some nautical club in the country of origin as a pleasure boat; that a consular certification from the country of origin be shown authorizing the yacht to use the National Flag of said country; that all documents be presented to the Treasury Department when applying for permit; and that a sworn statement be made before the Collector of Customs to the effect that the boat is used for pleasure only and not for commercial purposes."



Westward carries a small 45 h.p. Universal gas engine as an auxiliary to the big 110 h.p. Atlas-Imperial Diesel

A HUSKY WEST COAST DIESEL FISHERMAN

Westward is an 86-foot, full diesel powered, hunting and fishing cruiser of 96 tons gross. She is owned by Campbell Church, Jr., of Seattle and is chartered out to hunting and cruising parties on the British Columbia and Alaska coasts.

Westward's main power plant is a 110-h. p. Atlas Imperial Diesel engine which gives her a speed of nine knots. To guard against unnecessary delay or possible danger in the event of a breakdown of the main power plant, L. E. Geary, naval architect, and Mr. Church devised this novel means of protection. They have tucked away in the engine room, very neatly and inconspicuously, a 25-45 h. p. Universal Superfour gas engine.

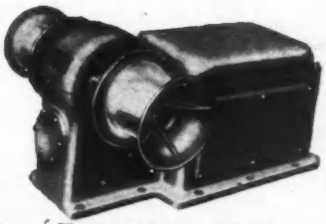
This is a high speed, four-cylinder, reduction gear, gas engine 2 feet high and with an overall length of only 4 feet 6 inches. This is connected through a 2 to 1 reduction gear to a bronze shaft running out parallel with the main shaft and slightly above and to port of it. Just beyond the outboard strut is fitted a 24x18 inch Hyde automatic feathering two-bladed propeller. When not in use, this propeller lies in a vertical position behind the strut with the blades on edge, offering a minimum resistance to the water. When the engine is running and the clutch is thown in, in either direction, the wheel takes up its own pitch. Running the engine at maximum of about 1600 r. p. m. or 800 r. p. m. propeller speed, she gave Westward the surprising speed of 5.27 knots. This was carefully reckoned running both ways over the measured nautical mile on Lake Washington. The blueprints for the job were by Ted Geary; Universal engine and Hyde propeller furnished by the Pacific Marine Supply; and the installation by the Lake Union Drydock & Machine Works.

AMORY-WARNER WEDDING ANNOUNCED

Mrs. Thelma Hall Warner of New York was married to John J. Amory in the Municipal Building, New York City, June 27, 1929, by Clark McCormack. Mr. Amory is the president of the Consolidated Shipbuilding Corporation, Morris Heights, New York City.

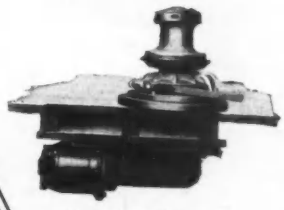
(*Continued on page* 136)

Advertising index will be found on 3rd last page

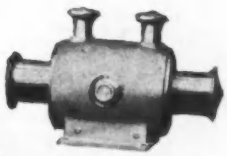


Horizontal Electric Hoist

▲ ▲ ▲ Choice of those who know A-E-CO AUXILIARIES



Motorboat Electric Windlass



Type "D" Boat and Sail Hoist

John H. Wells, John H. Wells, Incorporated
"We have specified your equipment on all of the yachts designed by us in the past several years."

Thomas D. Bowes
"For many years I have specified and used your equipment on the finest work I have turned out."

C. J. Matthews, The Matthews Company
"It is our regular practice to recommend and advise the installation of A-E-CO windlasses."

Daniel H. Cox, Cox & Stevens, Inc.
"We expect to continue the use of your equipment on our new yachts."

H. J. Defoe, Defoe Boat and Motor Works
"... an engineering service every yachtsman should know and appreciate."

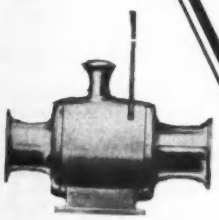
Bruce Scrimgeour, Consolidated Shipbuilding Corporation
"This equipment has been entirely satisfactory to us in every way."

J. F. Masterson, New York Yacht, Launch and Engine Company
"Your equipment has certainly eliminated a great deal of hard work in operating a yacht."

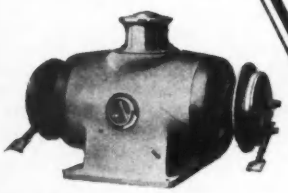
A. E. Luders, Luders Marine Construction Company
"The skippers of our various boats are well pleased with your machine."

Albert E. Eldredge, Eldredge-McInnis, Incorporated
"... the very satisfactory experience we have had with your product."

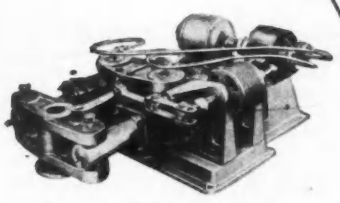
Henry C. Grebe, Henry C. Grebe & Company, Incorporated
"We have specified A-E-CO windlasses on all yachts built from our designs for the last three years."



Hand Windlass Type "J," No. 0



Type "G" Windlass



Electro-Hydraulic Steerer

American Engineering Company

2419 Aramingo Avenue - Philadelphia, Pa.

Export Department, 50 Church Street, New York

New York Distributor:
SMITH-MEEKER ENGINEERING CO.
123 Liberty Street
New York City

New England Distributor:
WALTER H. MORETON CORP.
1043-45 Commonwealth Avenue
Boston, Mass.

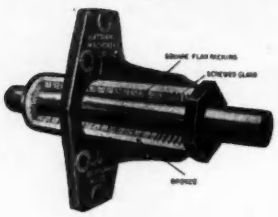
New Orleans Distributor:
H. F. RASMUSSEN
Queen & Crescent Bldg.
New Orleans, La.

San Diego Distributor:
THE MCCAFFREY CO.
311 West Broadway
San Diego, Calif.

Los Angeles Distributor:
VICTOR E. DALTON, INC.
542 S. Figueroa Street
Los Angeles, Calif.

Texas Distributor:
PEDEN IRON & STEEL CO.
Houston, Texas

The Hathaway
RESILIENT
Flax Packed Stern Bearing



Vibrationless
Quiet Running
Long Life
Economical
Trouble-Proof

Severest tests, over a period of fifteen years, have proved to builders and experienced boat owners that the "Hathaway" is beyond question the ultimate in stern bearings.

By means of flax packing and correct design, costly and annoying stern bearing troubles have been entirely eliminated. The "Hathaway" is a combination stern bearing and stuffing box, consisting of a strong, non-corrosive bronze casting. Entire bearing length composed of tightly compressed, paraffin impregnated flax packing. No contact between shaft and metal housing; no metal to metal wear; no pound; no vibration; no sand grind; no scored shaft. Heating merely melts paraffin in packing, which lubricates and cools. Repacking simple and inexpensive—a one-to three-hour job, without removing bearing from boat.

Actual tests have shown 3,000 to 15,000 hours (one to five years) running without repacking or noticeable shaft wear.

Write for illustrated, descriptive literature.

HATHAWAY MACHINERY CO.
NEW BEDFORD, MASS.

AQUA-PRESSOR

A combined air compressor and pump unit of rugged construction and many uses. Furnished with either 32 or 110 volt motor. Can also be had with compressor only. Manufactured by the makers of Hi-Duty Direct connected pumps.

Write today for literature and prices.
Used by Leading Yacht Builders

BOWLER, HOLMES & HECKER CO.
259 GREENWICH ST. NEW YORK, N. Y.

MARINE GLUES
1—Garboard leaks—Jeffery's Liquid Marine Glue
2—Pontoons—Ferdico Aviation Liquid Marine Glue
3—Under canvas—Jeffery's C Quality Marine Glue
4—Deck seams—Jeffery's No. 1 Yacht Glue
5—Speed boats—Ferdico Aviation Liquid Marine Glue
6—Side seams—Ferdico Seam Filler
7—Canoes—Jeffreys' Special Marine Canoe Glue
8—Old rowboats—Jeffery's No. 7 Soft Quality Marine Glue
At all dealers everywhere.
L.W. Ferdinand & Co.
152 Kneeland Street, Boston, Mass.

YARD AND SHOP

(*Continued from page 134*)

MILE-HIGH CHAMPIONSHIPS OF CALIFORNIA

It is a far cry from Salton Sea, where the outboards raced three months ago, to Lake Arrowhead, that is up and down; from 240 feet below sea level to one mile above.

Needless to remark, the atmospheric conditions present a marked contrast in the two locations, and it must have been the tonicity in the mountain air which gave Commodore Murphy of Salton Sea the nerve to come up here and drive that Sea Horse 32 on an Elsinore C hull and hang on to the transom of Blue Streak, the world's fastest outboard, for two magnificent heats of five miles each which thrilled a large concourse of eager onlookers who thronged the hillsides for miles around this sparkling blue gem of the mountains. The lake is 2½ miles in length, 1¼ in breadth and a total shore line of 14 miles, just a trifle smaller than Elsinore.

Saturday, the sixth, the wind was high and going very rough; nevertheless, the contestants gave some exhibitions of nerve, courage and seamanship which time and again made the crowd scream with excitement. The climax was reached when Crandall Comet, while doing her stuff, was caught with a gust of wind under her arched bow and staged a magnificent wing-ding, throwing her plucky pilot, Johnny Adams, into those cool and refreshing waters.

As the wind continued to rise, the Race Committee decided to run only one heat of each event and save the motors for the second day.

The regatta opened with the fishing skiff race, and it was a scream. These heavy craft were powered with Baby Eltos, which made about 4 m.p.h. Out of fifteen contenders, strange to say, H. G. Ferguson was somehow or other able or lucky, perhaps, to pick a fast one, and the Blue Streak pilot was an easy winner. This novelty event proved an interesting study in the evolution of the outboard, as well as affording much amusement from its comical aspect; some, for instance, when they saw their motors weren't so hot, got out the oars and tried to make more speed; others, when being overhauled, would grab at a passing skiff and steal a tow, all of which provoked great laughter.

After one heat of severe punishment, all agreed to call it off until 8.30 the following morning.

Rupert Turnbull, father of the well-known Loretta, and a prominent Los Angeles attorney, drove his maiden race in the Class C, Division I, or amateur event and placed a winner in the first heat, but shipped a heavy sea on a turn and lost out in the second.

Commodore Murphy, of Salton Sea, drove a big Sea Horse 32 on his Class C light Elsinore hull in the Class D event and put up a wonderful fight with Blue Streak for first place, and but for his lack of experience on the hairpin turns he was equal to the occasion in every other respect, and at that finished a good second with Black Maria and another Sea Horse following.

T. H. Tupman also drove his maiden race in the amateur Class C event and showed real class, coming in with two firsts and a second.

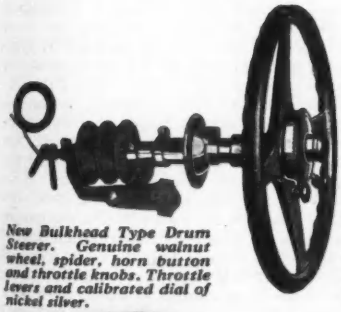
Johnny Adams overcame considerable hard luck, first cracking his cylinders when he was blown over and secondly smashing his hull in collision with the Sunkist Kid, but a rival boat builder quickly repaired the break with a piece of packing box so he might get out and beat one of his own boats in the Class B event. This is the kind of sportsmanship one observes at almost every regatta—rivals loaning a magneto, lower unit or fast prop to each other. He won the Class B event but was outclassed on the turns in Class C.

RESUME OF THE RACES

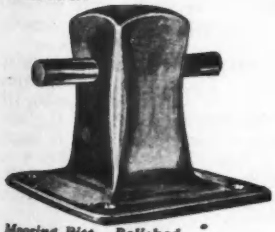
	Time of Heats			*Point*
Class B	*1st*	*2nd*	*3rd*	*Score*
1. Crandall Comet, John Adams...	9:30	9:23	9:15	1161
2. Pontiac, C. G. Stewart.....	9:56	9:57	9:50	1009
3. Miss Hupmobile, T. H. Tupman..	...	...	...	980
Class C, Division II				
1. Blue Streak IV, H. G. Ferguson	10:07	9:18	9:19	1161
2. Wild Oats, Al Thomson.....	9:49	9:27	9:29	1122
3. Miss Hupmobile	10:25	9:35	...	937
Class C, Division I				
1. Miss Hupmobile, T. P. Tupman..	10:26	10:26	9:27	1161
2. Wild Oats, Mildred Milde.....	11:12	...	9:41	940
3. Blue Streak IV, Chuck Hall.....	...	...	9:32	650
Class D				
1. Blue Streak IV, H. G. Ferguson	8:03.5	8:02	...	800
2. Shamrock, Comm. Murphy.....	8:38	8:33	...	722
3. Black Maria, Al Thomson.....	8:45	8:44	...	646

Advertising index will be found on 3rd last page

Standard with Corsair



New Bulkhead Type Drum Steerer. Genuine walnut wheel, spider, horn button and throttle knobs. Throttle levers and calibrated dial of nickel silver.



Mooring Bitt. Polished brass or nickel silver Four sizes 4¼ x 4¼" base to 9" x 9" base.

CORSAIR cruisers, too, take their place among America's leading boats that are regularly equipped with ERICO-KAINER Marine Specialties. These modern fittings not only give a stylish finishing touch to smart boats, but enhance the ease of control and promote safety. ERICO-KAINER Marine Specialties are not only of advanced design, but manufactured of the highest grade cast bronze and nickel silver they endure the hardest kind of service, seldom if ever requiring replacement.

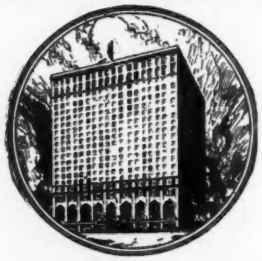
Write today for catalogue and price list of ERICO-KAINER Marine Specialties. Also complete line of Outboard Specialties.

Two Light Ceiling Fixture. Highly polished cast bronze.

Cabin Control Spotlight. Made entirely of nickel Silver.

ERICO-KAINER CO.

763-767 MATHER STREET CHICAGO, ILLINOIS



In Detroit . . . the

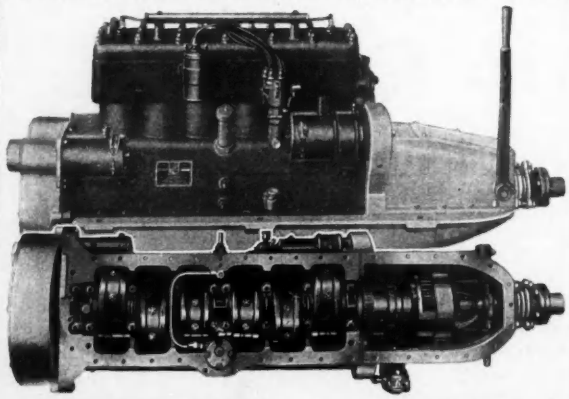
Detroit-Leland Hotel

Seldom, if ever, has any hotel enjoyed such success as the new Detroit-Leland Hotel.

And today the Detroit-Leland enjoys a local, national and international reputation which places it among the world's foremost exclusive hotels.

700 Large Rooms with Bath
85% are priced from $3.00 to $5.00

DETROIT-LELAND HOTEL
Bagley at Cass
WM. J. CHITTENDEN, JR., *Managing Director*
Direction
BOWMAN MANAGEMENT



INTESTINAL STAMINA

Call it **intestinal stamina** or call it plain **guts**—that's what a dependable marine engine must have—and plenty of it.

Most engines run good when new. But it's the way they perform after several seasons of grueling service that counts.

FALCON SERIES

1-Cyl.	5 H.P.	Cat. M-1
2-Cyl.	10 H.P.	Cat. M-1
4-Cyl.	15 H.P.	Cat. M-2
4-Cyl.	40 H.P.	Cat. M-4
6-Cyl.	50 H.P.	Cat. M-5

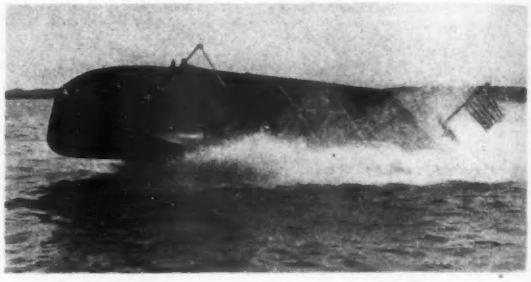
You don't have to be an expert mechanic to recognize that the FALCON Series have characteristics of smoothness and intestinal stamina which distinguish them from all other motors. It is self-evident by either comparing their construction details with other motors or riding in a FALCON-powered craft. We can send you all the details you want. Just tell us in which FALCON you are interested.

UNITED STATES MOTORS CORP.
2 Nebraska Street **Oshkosh, Wis.**

SOMETHING NEW IN GEAR DRIVES

A new type of craft is to be put on the market by the Gray Marine Motor Company, which will feature, among other things, the installation of the motor in the stern of the boat, with propeller shaft running forward to a gear box and then aft to the propeller. The new boats are not all of a single type, but will be the products of various manufacturers. Ranging in length from 14 to 20 feet, they will be known under the trade name of Autocraft, which will distinguish those boats which are provided with the five unusual features of equipment that are to be produced under the combined resources of five large manufacturers of automotive accessories. Standardized control of extreme simplicity, convenience, comfort and safety will characterize Autocraft.

The Gray Vee drive is one of the outstanding features. A new type of compact gear box permits the motor to be installed in the stern of the boat, where the engine compartment does not break into the most valuable part of the cockpit space. The drive shaft leads forward to one side of the box, while the propelier shaft leads aft from the other side, with a 2½-inch offset between shafts. The arrangement permits of easy adjustment of the angle between shafts, the variation being securd in the gear box itself. Extremely compact, the box is approximately 8 inches high and weighs less than 18 pounds.



Turning in a 40-foot circle at 35 m.p.h. with a Dyer Motorcraft

New Cruiser Rules a Success

(*Continued from page 33*)

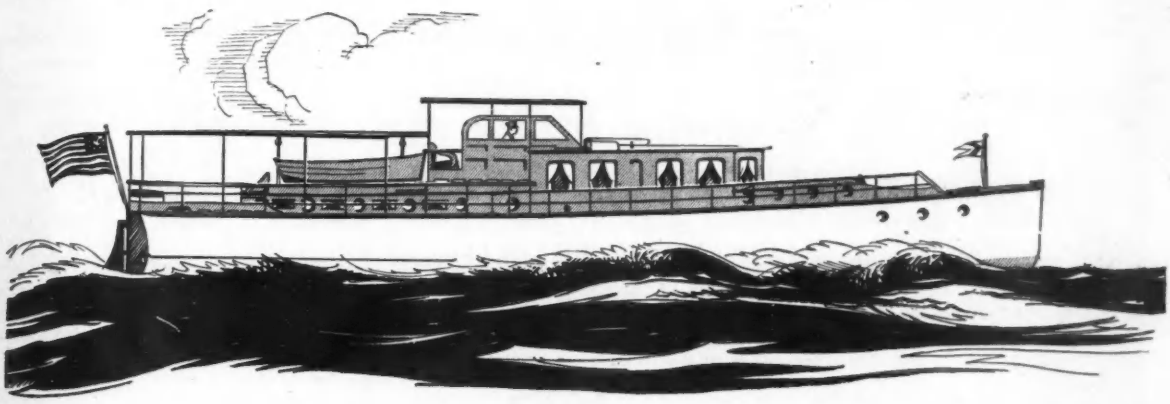
without sufficient time for long trials and the elimination of minor defects. It speaks well for the builders of this boat in that she was able to negotiate the entire 100 nautical miles without any delay whatever and reached Block Island in an elapsed time of 8-57-55. Her allowance was sufficient to give her a corrected time of 6-14-13 and she was able to nose out Revelation on corrected time by a mere 34 seconds. A wise choice of course on the part of the skipper of Sea Dream helped in winning this contest. It seems that as the competing boats approached the eastern end of Long Island Sound, another competitor was observed to be some five minutes ahead of Sea Dream. This boat selected a course through Plum Gut while the skipper of Sea Dream elected to go through the race. This maneuver helped materially as the tide through the race was running much stronger than through the Gut and the advantage gained at this point caused Sea Dream to reach Block Island four minutes ahead of the other competitor, a clear gain of about nine minutes by a wise choice of course. Had he continued on the same course as the boat ahead, he would have been unable to overtake him and consequently would have remained five minutes or more behind which would have cost him the race.

Of the competing boats, four were Dawn cruisers belonging to yachtsmen in New York waters. These were Sandra, owned by Tracy Higgins, Irene owned by H. W. Bacon, Agawam III owned by W. C. Baldwin and Wipota, owned by R. G. Jackson. These boats are all twin screw cruisers of 45 feet in length and fine, comfortable boats for a race of this kind. They were unable to win the race although they finished in 5, 6, 7 and 9th positions. Two of the competing boats were Fleetwing cruisers, these being Wander II and Scaroon.

As usual at all its motor boat races, the Yachting Department of the Athletic Club was host to the crews of the visiting boats on the evening before the race. An excellent dinner was served accompanied by music and dancing. This feature was thoroughly enjoyed by the visitors and furthered the good fellowship and sportsmanship which existed among the competing skippers.

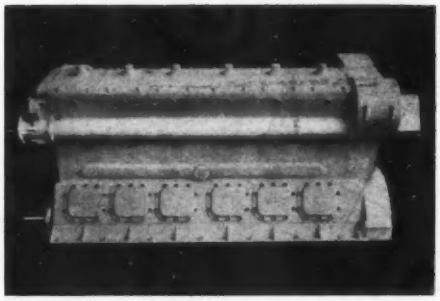
(*Continued on page* 140)

Advertising index will be found on 3rd last page



30 MILES PER HOUR WITH TREIBER DIESELS

one-third the space



one-sixth the weight

Heralding the dawn of a new era—*the day of small, fast craft, Treiber Diesel driven*—two most remarkable boats are building at Purdy's Port Washington yard, Long Island, New York.

The owners of these boats are national figures—one the former Governor of a State, the other a sportsman of world-wide repute—both accustomed to, and demanding *the best,* and, in this particular instance, demanding what *Treiber alone can give:*

30 miles per hour of comfortable, vibration-less cruising with Diesel safety and economy.

This they will get from their Purdy designed 72′ x 14′ hulls—each with a pair of 300 h.p., 12 V-cylinder *Treiber Diesels.*

Whether you contemplate the building of a new boat or the Diesel conversion of the old, you should by all means investigate the *Treiber,* the progressively different yacht Diesel, built in sizes and types to meet practically any H.P. or service requirement. As a first step in this direction send for the *Treiber* Bulletins. They illustrate and describe Electric Generator Sets 7½ to 70 K.W. capacity, and Marine Engines 65 to 3000 H.P. They will be sent promptly upon request.

TREIBER DIESEL ENGINE CORP.

Dept. MB—CAMDEN, N. J.—U. S. A.

CABLE ADDRESS: "DESELMOTOR"

Red Wing Thorobred
THE MOTOR WITH POWER TO SPARE

The Season's Motor Sensation!

6 CYLINDER RED WING "WARRIOR" 30-50 H.P.

BORE 3⅛", STROKE 5"
PISTON DISPLACEMENT 230 CUBIC INCHES

A nation-wide demand for the "Warrior" growing larger every day, is sound proof of its ability to perform perfectly and meet every test. No other motor in Red Wing's 28 years of successful motor building has created such a widespread sensation.

$495 WITH ELECTRIC STARTER

Light in weight, ruggedly built, powerful, speedy and completely equipped—the WARRIOR has quickly established itself as the outstanding powerplant value on the market today.

Write today for complete data. Immediate deliveries.

RED WING MOTOR CO.
(WARRIOR DIVISION) RED WING, MINN.

EASTERN DISTRIBUTORS:
W. H. MORETON CORP. 1043 Commonwealth Ave., Boston
VERRIER, EDDY CO. 201 East 12th St., New York City
W. E. GOCHENAUR MFG. CO. 631 Arch St., Philadelphia
F. B. EISENBRANDT Foot of Light St., Baltimore, Md.

New Cruiser Rules a Success

(*Continued from page* 138)

At the Block Island end, William Fuller of City Island, was serving as timer and patiently awaited the arrival of the boats. The elapsed time of the last boat in was just over 13 hours which indicated that it had been necessary to remain awake for the better part of the night in order to get the correct time of finish.

In conjunction with the race under the measurement rule, a separate set of handicaps had been prepared according to the past performance rule. This rule bases the handicap on the stated speed of the boat as declared by the owner and it is strange how few yachtsmen can tell within a reasonable amount just how fast their boats are able to go. In only very few cases did they come reasonably close to their scheduled time and since two of the boats which were racing on permanent handicap certificates were able to better their previous time considerably these two were awarded first and second place under this rule. Andy, owned by D. C. Anderson, proved to be the winner, followed by Agawam III.

It will be interesting to compare the results of this race to Block Island with the next race in which the greater part of the same boats will compete. This will be the Cruiser Championship race on July 27th over a general similar course to Stratford and return to Lloyds.

A complete summary of results follows:

SUMMARY, CRUISER RACE TO BLOCK ISLAND

July 13, 1929, 100 Nautical Miles

			Rating	*Allowance*	*Elapsed Time*	*Corrected Time*	*Position*
Sandra	T. Higgins	Crescent A. C.	60.83	0-53-50	7-14-28	6-20-38	5
Irene	H. W. Bacon	Seahorse Y. C.	53.76	1-47-57	8-12-35	6-24-28	6
Agawam III	W. C. Baldwin	N. Y. A. C.	52.19	1-01-55	8-17-20	7-15-25	9
Suzanne	A. Gobel	Sheepshead Bay	52.49	1-59-14	9-23-16	7-24-02	11
Sonny	A. D. Phelps	N. Y. A. C.	52.51	1-59-03	D N F		
Riathenia	D. F. D	Bayside Y. C.	50.80	2-14-59	D N F		
Release	B. Randall	N. Y. A. C.	50.07	1-22-10	13-02-10	11-40-00	13
Wanderer II	W. L. Liefeld	N. Y. A. C.	47.88	2-25-01	9-01-57	6-15-56	
Scaroon	P. Lesserm[illegible] Jr.	Colonial Y. C.	46.30	3-02-46	10-21-07	7-18-21	10
Andy	D. C. Anderson	Bayside Y. C.	39.08	4-42-34	10-57-23	6-14-49	3
Revelation	T. F. Egan	Stuyvesant Y. C.	38.44	4-53-02	11-07-49	6-14-47	2
Rusalka	J. R. Reuling	Bayside Y. C	36.90	5-20-18	D N F		
Wipota	R. G. Jackson	Bayside Y. C.	52.83	1-56-12	8-32-44	6-36-32	7
Lorraine	R. A. Court	Knickerbocker Y. C.	59.75	1-01-18	8-14-10	7-12-52	8
Sea Dream IV	G. de F. Larner	Sheepshead Bay	48.00	2-43-42	8-57-55	6-14-13	1
Liz II	W. J. Cranwell	N. Y. A. C.	55.91	1-29-23	9-19-14	7-49-51	12
Damfino III	J. E. Wiehe	Harlem			D N S		

Advertising index will be found on 3rd last page

COLUMBIAN
BRONZE PROPELLERS

AN OPEN LETTER
TO
MR. EDSEL FORD

(and to any others who may care to read this over his shoulder.)

CAP'N ALLSWELL Says:

"Cap'ns of industry as well as Cap'ns of craft choose Columbians first."

ROBERT A. PATRICK, PRESIDENT — HARRY W. BENNETT, TREASURER — ROBERT B. PATERSON, SECRETARY

COLUMBIAN BRONZE CORPORATION
ENGINEERS — MACHINISTS

MANUFACTURERS COLUMBIAN PROPELLERS THE WHEELS THAT WIN

SPECIALISTS HEAVY BRONZE CASTINGS STANDARD OR SPECIAL ALLOYS

FREEPORT, LONG ISLAND, N.Y.

Dear Mr. Ford:

This is to welcome you into the ranks of Columbian users, and to express our confidence that you will be more than pleased with the performance of your new boat the "Typhoon."

The Style "I" Columbian Propeller with which the Typhoon is equipped will give your boat its top speed under all conditions.

You may be assured that its unvarying efficiency will prove a constant source of pleasure.

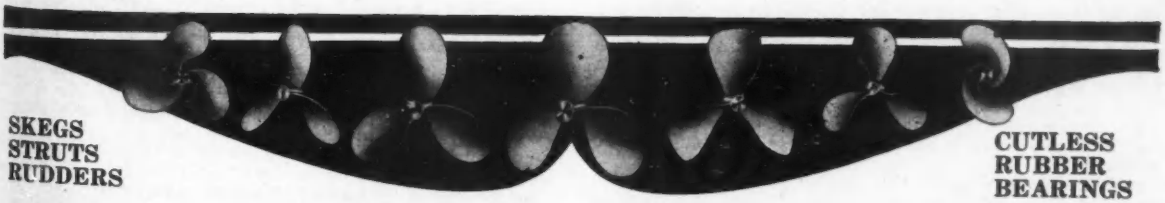
Sincerely yours,

Robert A. Patrick

President.

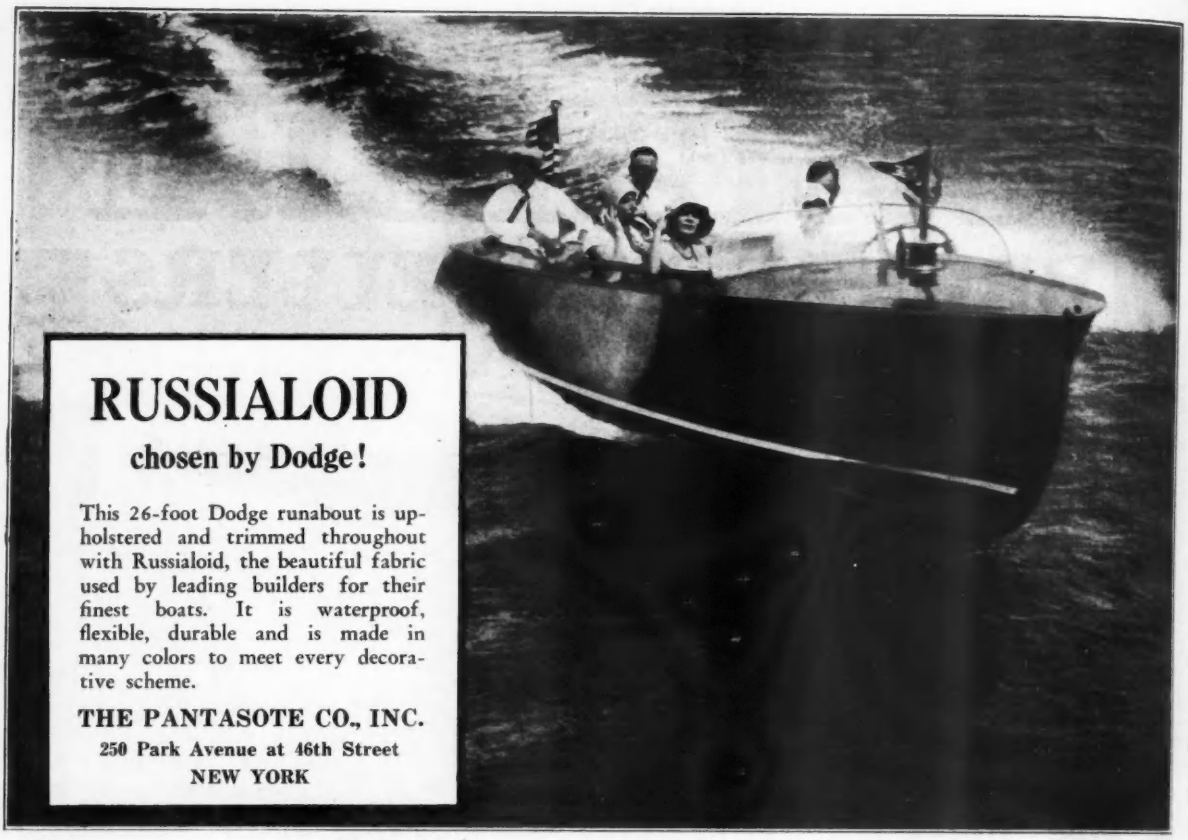
The Columbian Equipped "TYPHOON"

COLUMBIAN BRONZE CORP. **208 No. Main St., Freeport, L. I., N. Y.**



SKEGS
STRUTS
RUDDERS

CUTLESS
RUBBER
BEARINGS


RUSSIALOID
chosen by Dodge!
This 26-foot Dodge runabout is upholstered and trimmed throughout with Russialoid, the beautiful fabric used by leading builders for their finest boats. It is waterproof, flexible, durable and is made in many colors to meet every decorative scheme.
THE PANTASOTE CO., INC.
250 Park Avenue at 46th Street
NEW YORK

THE CONVERSION OF GWEMMY

(*Continued from page* 42)

the darker bagoc carlins accentuate. Lighting is electric, thanks to my junk outfit.

The plan and photographs will tell more than words.

The rig—I suppose it is a jib-headed cutter, it may be a Chesapeake skipjack—I am a great admirer of both, but here are the measurements. The mast is a 50 foot stick, 9 inch butt tapered to 5½ inch peak. It is stepped 16 feet aft with a 4½ foot rake. The stays are ½ inch plough steel to ⅞ inch U bolt rigging screws, two mainstays from the hounds at the 37 foot point and a topstay on either side. The chain plates are 3 inches wide, ⅜ thick mild steel, 6 feet long, all galvanized These are bolted to the hull through the bumper rail and 6 inch inside stringer with a 1-inch bolt, then over a 6-inch channel piece. This brings the rigging screws to a convenient height for working. We used cable clamps but found they slipped under serious strain and so they have been replaced with Roebling rope sockets. We believe these are permanent.

The bowsprit is 7 feet, chain and cable stayed. Two forestays carry first the head sail and second the jib. The mainsail hoist is 39 feet with 24 feet on the foot, a total area of 468 sq. feet. The boom is 5 by 26 feet. The headsail is 16 feet on the foot by 30 feet leech, it works on a rope horse and has an area of 240 feet. The jib has an area of 196 feet and handles as is customary. The total sail area is 904 square feet. There is just enough weather helm to make her safe. Time and again she has sailed herself hours on end while we prepared lunch and enjoyed an hour below. In heavy weather she lays to under three-reefed mainsail alone or with headsail and two reefs in the mainsail. We built a heavy permanent boom rest aft. It is a joy and a godsend. When laying-to the boom is lashed to the boom rest and much jamming and clashing of gear is saved. There are no preventer back stays, but when it is necessary to lay to, the heavy topping lift is fastened to a cleat and tightened down.

As children often sail on the boat, we built a permanent rail around the decks. It looks a little awkward, but that is small business compared with a lost child.

A photograph shows the steering gear construction. All controls of the engine lead to the cockpit, as do all sheets. One man can handle her, but he must work. In a recent blow she kept three of us hopping.

No one can handle these boats, navy designed and built to navy specifications, and not get a new respect for the men who were responsible for such a craft. For all the hard bilges the entrance is fine; they do remarkable things with little power; they sail well, they are seaworthy beyond belief, and they are built to stand up. Gwemmy is planked in 1⅞ inch white cedar, her frames are oak, 2½ by 2½ inches on 12 inch centers and double to the water line, and every fastening is a copper rivet. Under power with that truck engine we get between six and seven miles and recently in a good breeze about one point forward of beam we sailed her twenty-seven miles in four and a half hours. With a beam wind she has considerable leeway, but with wind anywhere forward or aft the leeway is very slight, which we feel is all that can be asked with only 4 feet 2 inches draft. Before the wind that long keel is more than good. She will run hours on end with not the least inclination to yaw or slew and the same is true when beating to windward.

We drove her through a fifty-mile northwester this winter and never once took solid water over the bows. And a kettle of stew bubbled merrily on (remember, the galley is on the floor) without spilling a drop. She never slaps or pounds. But it takes a wind to drive her.

This summer I expect to put 3,000 pounds of iron on the outside in the shape of two plates one inch thick, eighteen inches wide and thirty feet long, one on each side of the keel, held in place with a series of one-inch bolts. It will stiffen her a lot and add a backbone strong enough to crush rocks.

No, she isn't a racing machine, she isn't a yacht in the Ritzy sense, but she is a big, comfortable boat. She is livable, she is usable, she is cheap to maintain, she is safe as a church, she does exactly the things I want a boat to do—that is all anyone can expect—so I gladly forgive her all the faults I know she has.

For the sake of the curious, let me add that complete, she cost me just a trifle under $2,750.00 and a year of happy puttering during spare moments.

Advertising index will be found on 3rd last page

Here's How We Could Save $1000 On Every DART

DART

We could use a single plank bottom instead of a layer of ten ounce canvas between double planking.

We could use much lighter and fewer frames sawed instead of steam bent auxiliaries; six inch instead of four inch spacing. We could save hours of labor by substituting screws for the thousands of copper rivets.

We could speed up production by squaring up the lines of the Dart, eliminating the graceful sweep of her sides and the handsome arch of her deck.

We could use other material for the propeller shaft than Monel Metal; other varnish for the finish than Val-Spar; ordinary cushions instead of box springs; plain fittings instead of stream line.

We could buy cheaper mahogany and spend less effort in matching the grains. In these and other ways we could undoubtedly save a thousand dollars in material and labor and *for a time only the experienced boatman could discern the difference.*

We don't intend to do this and we won't. We mention these possibilities merely to emphasize the fine points of construction and workmanship that give to the Dart exceptional seaworthiness, smooth riding quality and added speed for the horse power employed.

22½, 26 and 30 foot open or closed models. Deferred payments if desired.

DART BOATS, *Inc.*

TOLEDO, OHIO

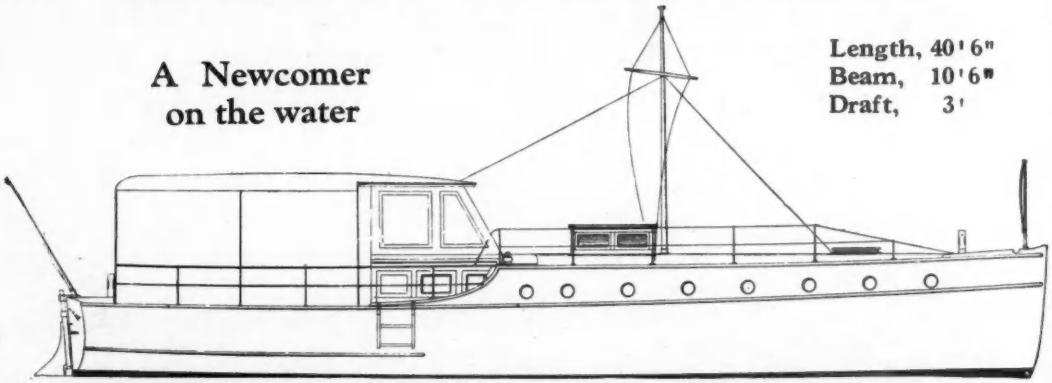
New York Office: - - - 11 West 42nd Street

CHICKERING 5611

THE LONG ISLAND FORTY!

A Newcomer on the water

Length, 40'6"
Beam, 10'6"
Draft, 3'



FOUR men who have built and sailed every sort of craft from catboats to seagoing steamships . . . who know, from experience, what cruising men need . . . have worked out the design and arrangement of this splendid cruiser.

Here is a real ship; small enough to be handled by one man, yet with real comfort for six and crew. A snug stateroom for two; an airy spacious main cabin with berths for four; a really comfortable sleeping place for the "paid hand"; a galley which puts to shame many a kitchen ashore; a truly livable after deck with room for bridge and dancing; a wide foredeck where you may bask after your swim, and handle your ground-tackle with ease.

In the *Long Island Forty* you need be no acrobat to get forward from the wheel to the anchors. You simply walk, not crawl or climb, out on the foredeck. The steersman is amply sheltered, and has plenty of room for charts. A real ship . . . a standardized design, built with tailor-made thoroughness . . . with a sturdy 115-horse Buda driving her 14 miles per hour . . . at a price no higher than "production" builders ask!

A demonstration boat now awaits your inspection in New York City. Come and see for yourself how comfortable are her arrangements; how spacious her decks; how easily she handles. For demonstration appointment, write or phone.

LONG ISLAND SHIPYARD, INC.
PORT JEFFERSON, N. Y.
Telephone: Port Jefferson 84

CALENDAR OF COMING EVENTS

(*Continued from page* 16)

Von Nieda, 3309 River Ave., Camden, N. J.

September 13-15—President's and Secretary of the Navy's Cup Regatta, Washington, D. C.—Wm. A. Rogers, Woodward Bldg., Washington, D. C.

September 14—Regatta, Riverside and Westville Y. C., Essington, Pa.—F. Von Nieda, 3309 River Ave., Camden, N. J.

September 14—Mays Landing, N. J.

September 15—Cruiser Race, Camden Trophy—Riverside Yacht Club, Essington, Pa.—F. Von Nieda, 3309 River Ave., Camden, N. J.

September 17—Margate, Longport, N. J.—D. H. Adams, Longport, N. J.

September 20—Eastern Division Outboard Championship, Middletown, Conn.—E. McNulty, Middletown, Conn.

September 21—Bay View Long Distance Race, Detroit, Mich.—George A. Haas, 2033 Park Ave., Detroit, Mich.

September 28—Rutherford Yacht Club—Outboard races.

October 4, 5—Eastern Outboard National Championship, Boston, Mass.—F. Wigglesworth, 20 Brookline Ave., Boston, Mass.

October 11, 12, 13—Cruising Club of America—Columbus Day Week-end—Lloyd's Harbor, Long Island—F H. Tucker, Sec'y, 81 Fulton St., N. Y. C.

November 11—Santa Barbara Power Boat Club, Santa Barbara, Cal.—A. L. Bobrick, 111-117 Garey St., Los Angeles, Cal.

November 30-Dec. 1—Second Mid-Winter Regatta, Lake Elsinore, Cal.—D. Mackay, Lake Elsinore, Cal.

DETROIT'S BARK DOESN'T BITE

This is a season of mortification for Detroit Yacht Club. Those among its members who, a year ago, foretasted power and glory and gave lusty voice to their expectations, today sit upon an ash heap and wish for broken potsherds with which to scratch their itching sores.

Last year, for the first time since 1904, the Gold Cup Race was not run. D. Y. C. took that omission deeply to heart; and justifiably so, for the Club, having won the classic trophy eight times out of 25 and seven times in succession, had come to feel a proprietary interest in it. At the very least, it believed itself obligated to test the right of the Braggs and the Townsends to let it gather dust on the Atlantic Seaboard. "It must not happen again," was the verdict of Detroiters when a season passed with no contest.

So they pondered, fumed, threatened, and finally boasted. The West would go East after the Gold Cup with four boats, three flying the burgee of D. Y. C. Gar Wood was to build two boats, one for himself and one for his son, as challengers. Dr. S. B. Smith, of Cleveland, loyal member of D. Y. C., would enter another in the name of the Yachtsmen's Association of America. James Talbot, Jr., of Los Angeles, would compete under the flag of the California Yacht Club. The East would have to defend its title; and the West promised to make the trip of the 1930 challengers a long one to Michigan. Fair weather prophecy! No wonder the Easterners bridle; accused Detroit of trying to win the race in the newspapers; and proceeded to lay down the keels of defenders.

Gar Wood is rebuilding Miss America VII and having a new craft, Miss America VIII, built for the Harmsworth Race; but nothing for the Gold- Cup—and he's off to Europe. Dr. Smith, a purposeful sportsman, is ill and cannot participate. Talbot remains the hope of the West; but Detroit where race and trophy are though to belong, will be a disinterested spectator at Red Bank during the greatest motorboat race in North America, its yachting colors furled.

If Detroit Yacht Club wishes to exhibit the Gold Cup in its trophy case, it must do more than wish or boast. The coveted prize will not be ours while the bark is in the West and the bite is in the East.

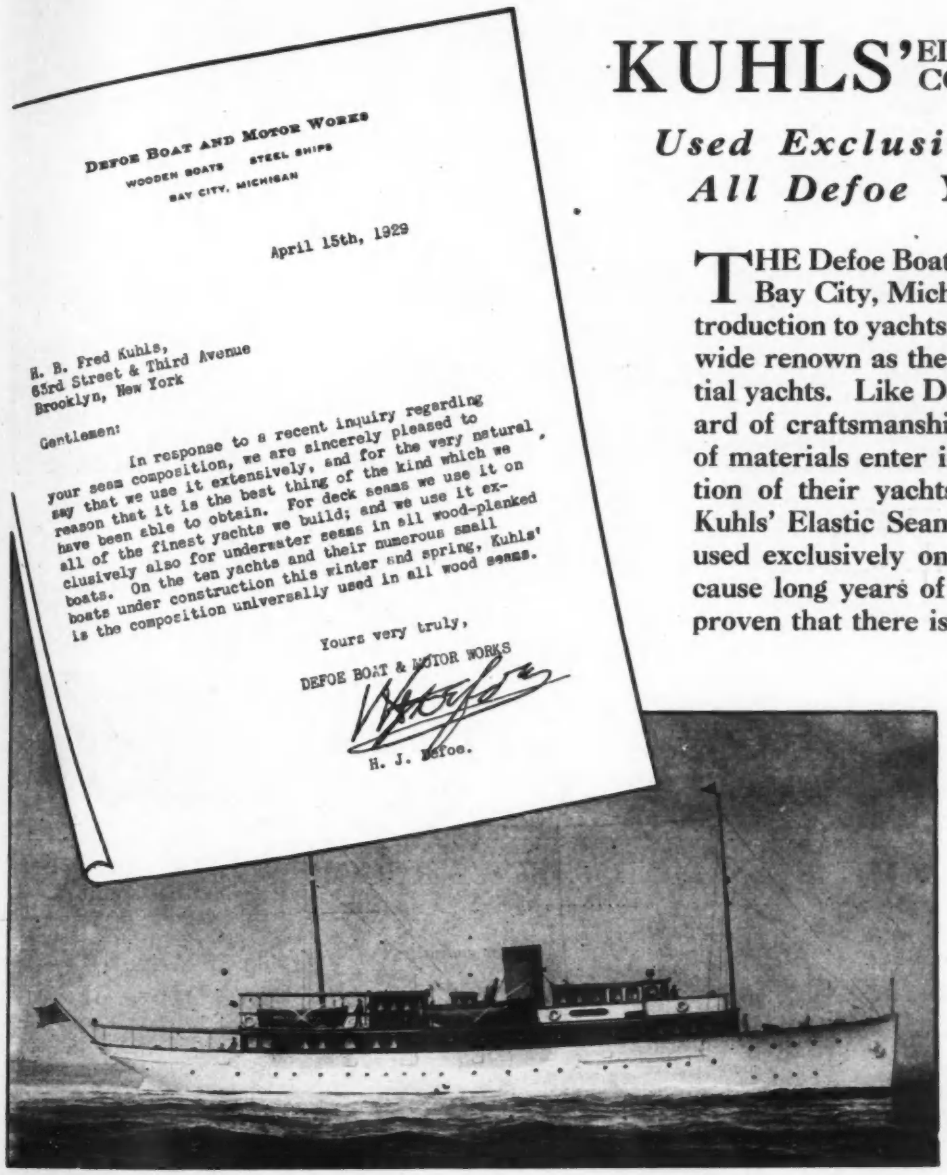
D. Y. C. Mainsheet.

Advertising index will be found on 3rd last page

KUHLS' ELASTIC SEAM COMPOSITION

Used Exclusively on All Defoe Yachts

THE Defoe Boat & Motor Works, Bay City, Michigan, need no introduction to yachtsmen. They enjoy wide renown as the builders of palatial yachts. Like Defoe's high standard of craftsmanship only the finest of materials enter into the construction of their yachts. Consequently Kuhls' Elastic Seam Composition is used exclusively on Defoe craft because long years of experience have proven that there is none better.



DEFOE BOAT AND MOTOR WORKS
WOODEN BOATS STEEL SHIPS
BAY CITY, MICHIGAN

April 15th, 1929

H. B. Fred Kuhls,
65rd Street & Third Avenue
Brooklyn, New York

Gentlemen:

In response to a recent inquiry regarding your seam composition, we are sincerely pleased to say that we use it extensively, and for the very natural reason that it is the best thing of the kind which we have been able to obtain. For deck seams we use it on all of the finest yachts we build; and we use it exclusively also for underwater seams in all wood-planked boats. On the ten yachts and their numerous small boats under construction this winter and spring, Kuhls' is the composition universally used in all wood seams.

Yours very truly,

DEFOE BOAT & MOTOR WORKS

H. J. Defoe.

A 169 ft. Diesel yacht designed by John H. Wells, Inc., and built by Defoe Boat & Motor Works for Mr. C. F. Kittering.

For forty years Kuhls' Elastic Seam Composition has been used by leading boat builders. Its superiority has been established in all sorts of craft and in all kinds of weather. One filling lasts eight to twelve years. It never becomes brittle, but retains its original elasticity which compensates for the swelling and shrinkage of the planking.

Kuhls' Elastic Seam Composition is made in three grades,—each for a particular purpose. *Use*—No. 1 for deck seams. No. 2 for hull seams. No. 3 for laying canvas on decks, housing and hatches; also for canvasing and repairing canoes.

On sale at Marine Supply Dealers and Leading Hardware Stores
Reach for KUHLS' Instead of Pitch

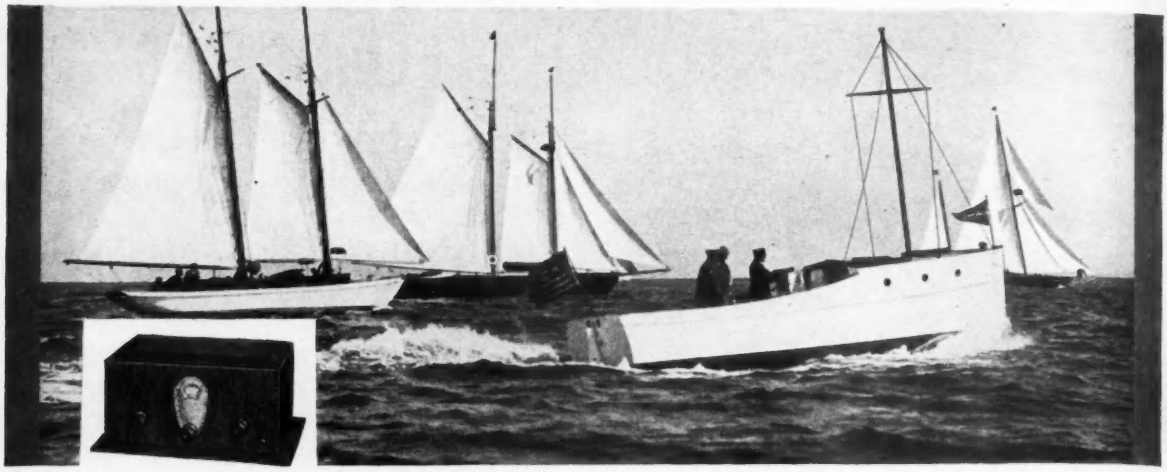
H. B. FRED KUHLS

Sole Manufacturers—Established 1889

SIXTY-FIFTH STREET and THIRD AVE. BROOKLYN, N. Y.

Elastic Flat Yacht White — *Elastic Gloss Yacht White* — *Elastic Trowel Cement* — *Elastic Deck Varnish*

ELASTIC SEAM COMPOSITION TRADE MARK



RADIO—a new type for pleasure craft

New pleasures, new safety, afloat on your boat. Hear short waves and broadcast, get the time and the news. Steady reception even with swinging antenna. National SW-4 has round - the - world-reception. Easy on batteries. Fine Cabinet harmonizes with the most luxurious surroundings. The price is very reasonable.

Write for full particulars.

Est. 1914

NATIONAL

SW-4 THRILL-BOX

NATIONAL CO., Inc., Malden, Mass.

AMERICAN MOTOR BOAT RECORDS

(*Continued from page* 20)

Six Miles

Class B, Division II

Trojan, C-67, driven by John Graham at Lake Elsinore, California, May 30, 1929. Built by Lake Elsinore Boat Works. Powered with Johnson motor. Speed 37.70 m. p. h. (2)

Class C, Division II

Century Kid, owned by Jim Welch at Oshkosh, Wisconsin, July 15, 1928. Built by Century Co., Johnson engine. Speed 33.65 m. p. h. (A)

Class D, Division II

Bullett, owned by Bill Higgins at Danville, Illinois, September 16, 1928. Built by Boyd-Martin, Elto engine. Speed 37.31 m. p. h. (C)

Ten Miles

Class C, Division II

Blue Streak II, owned by L. Baughan, driven by H. G. Ferguson, at San Diego, California, Dec. 16, 1928. Built by Holt, Evinrude engine. Speed 38.59 m. p. h (B)

MILES OF ACTION

(*Continued from page* 44)

miles per hour, with the two engines turning at half throttle. Those Fairform Flyers fairly fly.

"Tell me just what you mean about ninety thousand miles of action" I asked. "I mean this" said Huck. "We brought up six boats, as you know—five cruisers and one commuter, five of the six being handled by their owners. Each boat had twin two-hundred horsepower Kermath engines. We turned the engines at normal cruising speed, made no attempt to break any records, but when we were underway we went. I figured up the total revolutions turned by all engines on the cruise and of course that quickly gave me the distance traveled by the pistons. It works out that the combined piston travel amounts, to be exact, to 90,018.14 miles. And if you like statistics, I might add that during the 1200 mile run the total number of engine revolutions amounted to the astounding total of 86,400,000.

My thoughts jumped to the man who had built those engines—J. B. Farr, President of the Kermath organization. "Your run is a wonderful tribute to Farr and his executives" I said. "Have you given him those figures? I know they would interest him."

"No" replied Huckins, "I haven't. But here's what I did tell Farr, our lubrication was absolutely perfect. We used Duplex oil, as do most other Kermath owners. We had full pressure all the time every day on every boat; we had maximum power; we never had a moment's trouble or worry over lubrication. Not even one fouled spark plug, during all those eight-six million revolutions. When we reached New York we conducted a cylinder inspection and there wasn't enough carbon to wipe off. That may sound incredible, but it's the truth. We just blew it off.

"I have told all this to Farr and he told me you were entitled to a world of credit for making Duplex Oil what it is, but he also took some credit to himself, because he is the man who insists on the use of good oil in his engines. So I guess you and Farr will have to fight it ou to see who is entitled to the credit. So far as we are concerned, Fairform Flyers will continue to carry Duplex plates, and our instruction book tells our owners that by using high grade oils they will save money, first because of economical oil consumption, second, by eliminating carbon and valve trouble, and third by preventing the wear that I know always comes as a result of using improper oil."

I should like to add just a personal word regarding this man Huckins and his boats, because during my trip with him to Provincetown I found him to be almost a perfect navigator. On our return, we shoved off in a heavy rain-storm that stayed with us all across the Bay. With extremely bad visibility, Huckins brought his boat dead against the harbor light within ninety seconds of the time he had figured. He is a boatman through and through, and I think it is because of his life-long knowledge of what boats must be, that he has been able to turn out such a wonderful job.

Advertising index will be found on 3rd last page

"FOR CONTINUOUS SERVICE AND FREEDOM FROM REPAIR"

Still another

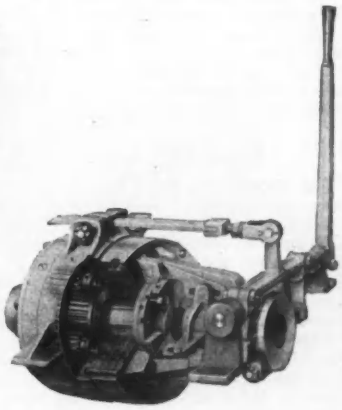
Engine Manufacturer who has built thousands of Horse Power, both Gasoline and Diesel, has come to us for a Paragon "90 Line" for his heavy duty motor...He demands of a Reverse Gear for his customers:

Continuous Service
Freedom from Repairs
Simplicity
Accurate Workmanship
Easy Adjustment
Ruggedness
A Hardened Gear Train Big Enough to Do the Job
Modern Construction

and A HIGH SPEED REVERSE

The "90" Line PARAGON REVERSE GEAR

"There are no trick parts to a Paragon"



PARAGON GEAR WORKS

407 Cushman Street ~ Taunton, Mass.

The New Paragon "90 Line" is being rapidly adopted as standard equipment by prominent Engine Manufacturers who insist upon quality and performance

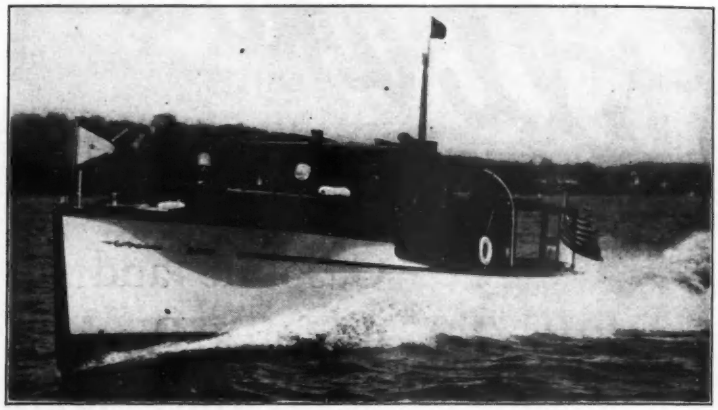
RED BANK YACHT WORKS

RED BANK, NEW JERSEY

THIS beautifully finished and able 45-foot custom built cruiser is ready for immediate delivery, fully equipped, including tender, electric lighting plant, Lux fire extinguisher system, etc. Speed 17 miles per hour. Handsomely finished throughout.

Price $18,000

Only one left! Write today for further particulars.



Visiting yachtsmen to the Gold Cup Regatta August 24-25 are invited to make their headquarters at our landings.

YARD AND SHOP

(*Continued from page* 136)

THE PEORIA MARATHON

In the long grind of the 200-mile marathon at Peoria, Illinois, on July 4, Lockwood motors once more demonstrated their stamina in standing up under gruelling runs by placing first and third in Class B. J. O. Weaver of Rockford, Illinois, came in twice for gas, but otherwise ran the whole course consistently and was the first to finish. Carl Long of Jackson, with a Lyman boat, ran the 200 miles with only one stop to fix his air pressure pump and, finishing 11th in the race, took third place in Class B.

The free-for-all was won by Frey with an Elto Quad, and 2 minutes and 17 seconds behind him Koeffler, with an Evinrude, finished second in the race, first in Class C. A Johnson 32 was third in the race and first in Class D, but the time could not be credited due to the fact that no N. O. A. affidavit had been made. Weaver, who won Class B with the Lockwood Racing Chief, was eighth boat to finish.

MIDDLETOWN HOLDS REGATTA

The Middletown Yacht Club, at Middletown, Connecticut, held its second Outboard Regatta of the season Sunday, July 14th. The course was a half-mile shorter than that which will be used in September for the Eastern Division's Championship—and all drivers were most enthusiastic about it. The width of the river at Middletown permits wide turns—the banks offer ideal vantage points for spectators—yet the surrounding hills protect the course from strong winds and insure ideal racing water.

Forty-two entries were received for the B, C, D and Free-For-All races Sunday. The girl drivers turned out well, but luck was against all but Mildred Mickey of Shrewsbury, who drove a beautiful race to place third in Class B with her Johnson 16.

In the second heat, Alice Hallowell joined the Hell-Divers at the lower turn. Marion Hasbrouck developed spark plug trouble which kept her out of money.

Carl Mason, of the Middletown Yacht Club, driving his Porteus Boat, Lockwood powered, won the Class B after a hard struggle with Malcolm Eldridge of Boston.

In the Class C Lady Luck deserted Dave Parigoni of Rhode Island when he had a good lead and only 100 yards to go. Dave's steering handle broke and he swam home. The finish was, Carl Mason first with his Lockwood, pushed hard by Sal Lombardi of Hartford and Fred Johnson of Bayville, Long Island, both Evinrude powered.

In the unrestricted Class D the Johnson 32's whined over the course in very fast time. In this race Eldridge placed first, Chesley Allen Jr., of New Jersey, second.

The Free-For-All was a wonderful race. Eldridge held the lead until the last turn, when Allen, swinging wide, but coming with all he had, gained a six-foot lead and hung onto it to the finish. It is a race that will be long remembered by the thousands who saw it.

D. R. Y. A. ACTIVITIES

Prominent among the yachting organizations which are working hard to promote interest in boating and to bring motor boat men and sailboat men together in a unified organization, the Detroit River Yachting Association, with George J. Haas at the helm as commodore, is proving itself to be an especially active group.

Composed of more than a dozen affiliated boat and yacht clubs, the Association has held a number of conferences and meetings, which have resulted in the formulation of a very complete program of regattas, cruises and social functions for the entire season.

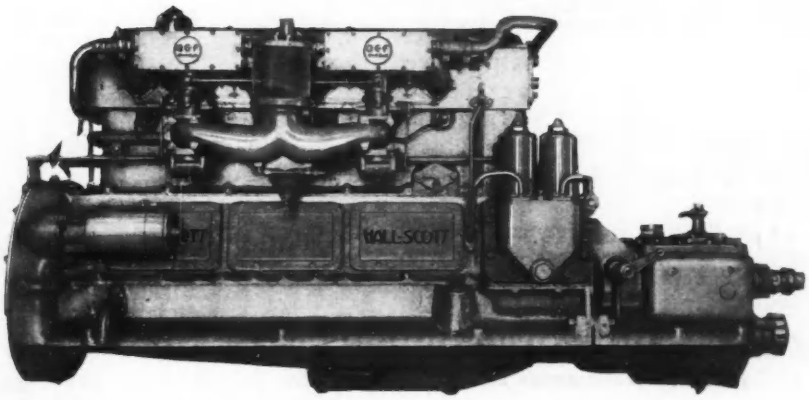
One of these big events was the D. R. Y. A. cruise and regatta at the Lake Shore Country Club June 22-23. This proved to be a wonderfully successful affair, drawing a fleet of more than 125 boats, three-quarters of which were sailboats of various classes and the rest motor boats.

Following this, the Association recently sponsored a regatta day for the Disabled American Veterans of the World War, during their ninth Annual Convention at Detroit. Twenty-seven motor boats were put on parade, including everything from 28-footers up to Commodore French's 200-footer. The Association is now in the middle of its very busy schedule, which does not terminate until well along in October.

(*Continued on page* 150)

Advertising index will be found on 3rd last page

HALL-SCOTT
MARINE ENGINES



IN a recent letter, Mr. Hand says in part—*"The Hall-Scott Motor in 'Bluebill' has been and is most satisfactory; in fact, I believe it to be the best all-around gasoline engine I have ever owned."* Note—Mr. Hand has owned and operated nearly every prominent make of marine engine manufactured.

"BLUEBILL"

Designed by William H. Hand, Jr., for his personal use. This sea going craft 56′ long, 13′6″ beam by 8′2″ draft, is powered with a Hall-Scott HSR-6 90-100 horse power reduction gear marine engine giving a speed of 10 M.P.H.

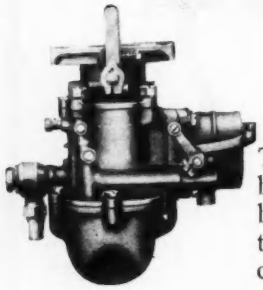
HALL-SCOTT MOTOR CAR COMPANY
DIVISION OF AMERICAN CAR AND FOUNDRY MOTORS CO.

Factory and General Offices
HEINZ AVENUE AT FIFTH STREET, BERKELEY, CALIF.

Northwestern Factory Branch	*Eastern Factory Branches*		*Southwestern Factory Branch*
902 Western Avenue	217 West Fifty-seventh Street	500 East Jefferson Street	240 Avalon Boulevard
SEATTLE, WASH.	NEW YORK CITY	DETROIT, MICH.	WILMINGTON, CALIF.

Factory Dealer: R. V. MORRIS & CO., San Diego, California

ZENITH



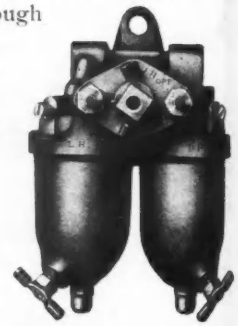
Better Performance — Safety Prevent Shutdown!

The Zenith Marine Carburetor is designed and built to apply the time-tested principles of Zenith carburetion to marine requirements. It is positive and dependable in action—there are no moving parts in any way affecting the mixture. Pitching, tossing and quick turns have no effect on the smooth engine performance.

If you wish to get the most in safety and satisfaction from your power boat this season—equip with Zenith *Marine* Carburetion. Write for catalog and name of nearest dealer.

There are Zenith *high-efficiency* filters for every make and model of gasoline and oil engine, to remove ALL impurities at sustained high speeds and in the hardest service. Efficient in action, easy to install and clean, Zenith filters are sturdy and durable, with *no fragile parts.*

A Duplex Zenith filter provides maximum safety if you frequent rough off-shore water, strong current or tides. It is cleaned without stopping the engine. Send for catalog.



ZENITH-DETROIT CORPORATION

Manufacturers of Zenith Carburetors and Filters

DETROIT **MICHIGAN**

BRANCHES:

NEW YORK **CLEVELAND** **CHICAGO** **MILWAUKEE**

ZENITH

YARD AND SHOP

(*Continued from page* 148)

CANADIAN HAS ENVIABLE GROUP OF TROPHIES

Outboard motoring enthusiasts are always interested in the accomplishments of drivers of other countries. Of more than usual interest is the group of trophies won during the past season by Fred Gilbert of Brockville, Canada. Cadet IV, an Evinrude Speeditwin powered speedboat, driven by Mr. Gilbert, established an excellent record during the 1928 season.

The fact that Canada is producing real drivers and speedboats is attested to by the enviable record of Mr. Gilbert, who ran rampant during the 1928 season, capturing a goodly number of firsts and accumulating a total of ten trophies. Three of the trophies included in the group, won by Mr. Gilbert in both Canadian and American waters, came to him as a result of setting new course records.

AT THE CHICAGO SHOW

The new 1929 Evinrude motors were the center of a great deal of interest at the Outdoor Show held recently in the Coliseum, Chicago. H. E. Richardson, of Wilson & Richardson, Evinrude distributors in the Chicago territory, states that Speeditwin and Fastwin, equipped with the tested Evinrude exhaust, caused a sensation among spectators in attendance at the show. Features of the new motors are: the tested underwater exhaust, effectively eliminating exhaust gases and banishing all exhaust noises; ease of starting, assured with the Evinrude super magneto, producing a 13,000 volt spark; full ball and roller bearing construction, making for long life and high speed; more power, four models ranging from 2½ to 20 h.p.; and more speed, 3 to 45 miles per hour.

R. I. ASSOCIATION JOINS A.P.B.A.

By a recent vote of the American Power Boat Association, a new club has become affiliated with the national organization. The new member is the Rhode Island Motor Boat Association, Providence, R. I., of which A. J. L. Knight is Commodore.

THE GALVESTON RACES

An 80-mile marathon was staged on July 4 at Galveston, Texas, with the course leading up and down Galveston Bay from Bolivar Roads to San Luis Pass. By negotiating the 80-mile course in 2 hours and 22 minutes, L. J. Lyons of Houston made an average speed of 29.66 m.p.h. which gave him the victory by a close margin of 18 seconds. Lyons received the grand prize of $500 as well as the $200 prize for being first to finish in his division. His boat, Health Maid, was powered with a Class C Evinrude motor.

Eddy Westerman of Galveston took second place in Miss Tidal Wave with an Evinrude C Engine and Buddy Pruitt of Goose Creek, piloting T-21, placed third but received an extra $200 as the class prize.

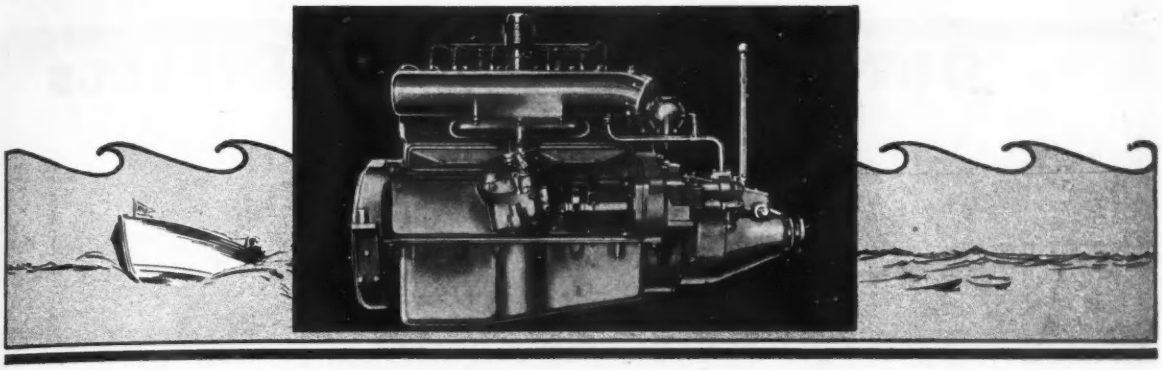
MANY SPILLS AT THE WESTERLY RACES

Rough water at the July 4 races of the Westerly Boat Club at Westerly, Rhode Island accounted for seven upsets and provided some thrilling races for both spectators and contestants.

The meet was conducted by the Race Committee of the Rhode Island Motor Boat Association with Phelps Ingersoll of Middletown as referee. The feature of the meeting was Dave Paragoni's driving in the first heat of Class C, when he started half a lap behind the field, passed them all, and finished in first place.

Commodore E. V. Howe of Newport won the Lawton trophy, offered to the driver scoring the largest total number of points. In Class B, Division 1, three miles, W. Beach placed first with a Lockwod motor. E. V. Howe won the three-mile family boat race with an Evinrude engine and in the runabout class, S. Alling defeated H. Dennison over a three-mile course. In the Special Class B, Division 1, three-mile race, E. Henrickson was the winner, while E. V. Howe took first honors in the two-mile, Class A contest. M. Eldridge lead the field in the three-mile, Class B event and Paragoni was the winner in the four-mile, Class C race. The free-for-all was a 10-mile race and was won by E. Lassone.

(*Continued on page* 152)



Chrysler Marine Engines are unfailingly dependable

Chrysler Imperial and Royal Marine Engines have done more than bring an added zest to motor boating through the sparkle, vim and vigor of their alert performance. They have given to the devotee of inland and coastal waters an added confidence in the craft he steers. No longer need he putter over his engines preparing them for the week-end run. Unfailingly dependable, they serve him in fair weather and foul as reliably as the car he drives on shore.

In Chrysler Marine Engines, mechanical efficiency has been brought to its ultimate. Power has been increased and weight reduced. All parts have been made handily accessible. Building to close tolerances has resulted in a remarkable record of low running costs.

Runabout, hydroplane, fishing craft, light work boats and many sizes and types of cruisers have been endowed by Chrysler Marine Engines with a power plant that is unexcelled. It is the invariable approval of owners which has impelled the leading motor boat builders including A.C.F., Dart, Chris-Craft, Corsair, Gar Wood, Sea-Lyon and Wheeler to specify Chrysler Marine Engines as the power equipment for their hulls.

* * *

Address your request for information to the Marine Engine Division, Chrysler Corporation, Detroit, Michigan, or to any of our distributors.

ATLANTIC RADIO & MARINE CO., INC.
Boston, Mass.

MARINE EQUIPMENT & SUPPLY CO., INC.
Philadelphia, Pa.

YACHT & MOTOR SALES CORP.
Wilmington, Calif.

HALL-SCOTT MOTOR CAR COMPANY
New York City and Seattle, Wash.

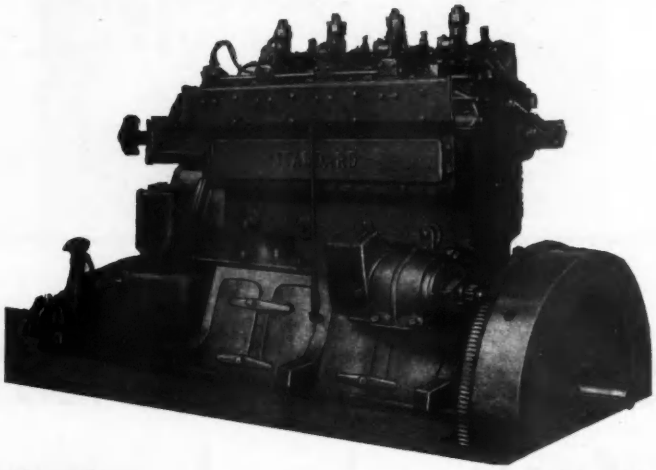
J. H. HUTCHINSON
Alexandria Bay, New York

SYRACUSE MOTOR CAR CO.
Marine Division, Syracuse, N.Y.

Chrysler **MARINE ENGINES**

CHRYSLER MOTORS PRODUCT

The OUTSTANDING YACHT DIESELS



Electric Starting
Four Cylinder 60 H. P.

—

Vibrationless
Six Cylinder 90 H. P.

LET US QUOTE YOU

STANDARD MOTOR CONSTRUCTION COMPANY

178 Whiton Street Jersey City, N. J.

STANDARD DIESELS

YARD AND SHOP

(*Continued from page* 150)

SCRIPPS TROPHY RACE AUGUST 17

On the night of August 17 the annual competition for the Wm. E. Scripps Reliability Trophy will be staged over a course that takes the racers a distance of 120 miles, from Detroit to Put-in-Bay and back again. Most of this distance will be run in the dark, which requires that the contestants use compass courses instead of the easier sort of off-hand daylight navigation by landmarks. In case there should be a fog, the best of the navigators' skill will be called upon, as part of the distance is run between islands, and in freight traffic lanes, etc.

The first run for this $5,000 Sterling silver trophy was made in 1912, from Detroit, and the last one from Cleveland to the Bay and back last year. Several hundred dollars worth of prizes had been secured for this contest and the tentative plan is to award as many prizes as there are entrants in the race. Howard Blood, W. D. Edenburn and A. R. Hackett compose the Race Committee.

BIG NEW CLUB PLANNED FOR NEWARK

The Essex Yacht Club is being organized at Newark, N. Y., and the plans call for an establishment more elaborate than anything of the sort now in New Jersey.

A boat house with complete facilities either on Newark Bay or on the Passaic River is projected, also a year-round town house on High Street, with gymnasium, swimming pool, living quarters and ballroom. An investment of $645,000 in buildings and grounds is contemplated.

Incorporation papers were filed a little over a month ago and offices opened at 44 Commerce Street, in charge of Richard H. Peer as executive secretary.

Alfred DeCozen, president of the DeCozen Motor Company, is slated to be commodore; Dunbar N. Hinrichs, of the General Exchange Insurance Co., vice commodore. Mr. Hinrichs is now vice commodore of the Babylon Yacht Club.

The club has three sites for the boat house in prospect, one on Newark Bay and two on the Passaic River, according to Mr. Peer; also several alternative locations for a High street town house. B. Hustace Simonson, New York architect, is now drawing plans for both structures.

BALBOA MILE TRIALS

History was made at Balboa, California, on June 15 at the Balboa Mile Trials when several successful attempts were made to establish new outboard records. An event of national significance and far-reaching consequences was successfully staged before a representative body of A. P. B. A. officials including Commissioner Bobrick and officers of the National Outboard Association.

Several new American records were made. In Class D, Division 2, Blue Streak IV, powered with a Johnson Sea Horse 32 established the remarkable speed of 47.28 m. p. h. Owned by Dr. Leo Baughman of Los Angeles, it was driven by H. G. Ferguson of the Lake Elsinore Yacht Club. The hull was designed by Ansil Holt and was built by the Lake Elsinore Boat Works. John Adams of Pasadena set a new Class B, Division 2, record in Crandall Comet, driving a Johnson Sea Horse 16 at a speed of 40.11 m. p. h. In Class C, Division 1, and Division 2, Blue Streak IV hung up new records when powered with an Evinrude Speeditwin Motor. In Division 2 the speed was 29.23 m. p. h. and in Division 1, 39.56 m. p. h. Chuck Hall of the Lake Elsinore Yacht Club was the driver. In Class B, Division 1, Miss Hupmobile, powered with a Johnson Sea Horse 16, was the successful craft, being driven at 39.22 m. p. h. by John Beneloski.

DUKE OF YORK CUP WON WITH AID OF SUPER-ENERGY MAGNETO

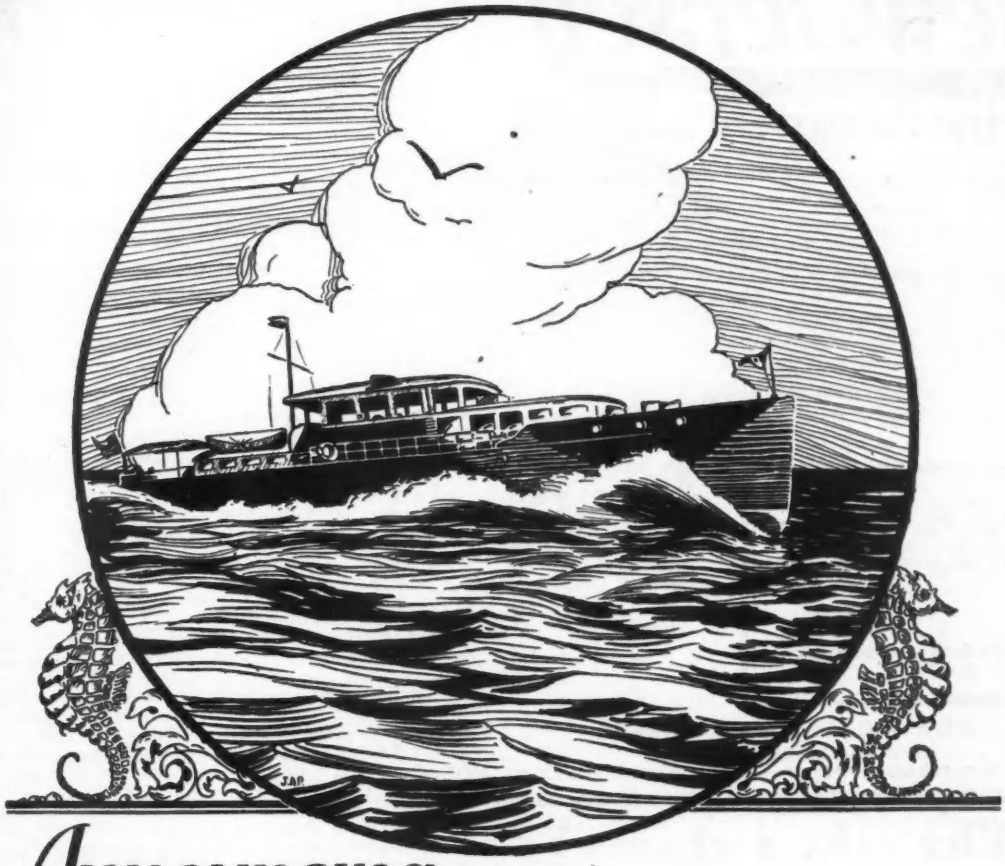
Ralph Snoddy, American speed boat pilot, won the Duke of York's Cup in the regatta on the River Thames, England, on June 29.

Snoddy's victory was especially impressive because it gave him a clean sweep ofthe entire three days of racing. The winner's average speed was 44.11 miles per hour.

According to a cablegram received from Snoddy by the Robert Bosch Magneto Company, Inc., at Long Island City, his boat, Miss Riocco III, was equipped with a Robert Bosch Super-Energy Magneto. Its unfailing performance throughout the was an important factor in Snoddy's sensational triumphs.

(*Continued on page* 154)

Advertising index will be found on 3rd last page



Announcing EMPIRE *Diesel Lubricant*

NOW—after years of exhaustive research in collaboration with world famous Diesel engineers, EMPIRE is proud to announce this superior DIESEL LUBRICANT. The extreme loads and heavy strains imposed upon a marine oil by Diesel engines can only be met by a lubricant built especially to withstand such conditions. EMPIRE DIESEL ENGINE OIL has been developed to meet the most severe tests. The famous Empire standards of refining and a knowledge gained by ceaseless experiments combine to make this newest of Empire products the finest Diesel lubricant known.

Dealers Use This Coupon!

Write today for exclusive distributor's proposition.

Name .....

Address .....

PERMIT NO. 98

Guaranteed 100% PURE PENNSYLVANIA OIL

PENNSYLVANIA PETROLEUM PRODUCTS CO., INC.

PROVIDENCE, RHODE ISLAND

"New Jersey"
Marine Paints & Varnishes

Copper Paint
Yacht White
Ship & Deck Paint
Spar Varnish
Copper Bronze

For Bottoms "New Jersey" Copper Paint, Red, Brown or Green. For above the waterline "New Jersey" Yacht White will stand washing and scrubbing. "New Jersey" Spar Varnish will not turn white and holds its gloss.

Write for Booklet, "Davy Jones Locker," About Paints and How to Use Them.

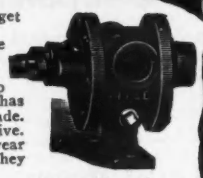
NEW JERSEY PAINT WORKS
HARRY LOUDERBOUGH, Inc.
WAYNE AND FREMONT STREETS, JERSEY CITY, N. J., U. S. A.

Why take a chance?

SOME DAY your craft may break away and be seriously damaged—perhaps damage other boats. Check up on your moorings before it's too late. Our new, illustrated booklet, *"Rope for the Boatman,"* helps you determine proper sizes, weights, lengths, kinds of rope for each boating purpose. Explains the use and care of rope; how to make knots, hitches, splices, etc. Sent FREE. No obligation. Address Plymouth Cordage Co., North Plymouth, Mass.

PLYMOUTH *The Rope You Can Trust*

LOBEE CIRCULATING & BILGE PUMP



You can't get a better or more reliable pump than the Lobee because there isn't a better one made. It has been the World's Standard of Pump Quality for 25 years. No other pump has proven so popular in the marine trade. Simple, compact, noiseless and positive. These pumps will outwear the engines to which they are attached.

Gear and Rotary Pumps from ½" to 1¼" suction and discharge. Different designs for various types of drive and mounting made to order.

Write today for catalog and prices.
Sold by Leading Dealers Everywhere.

Lobee Pump & Machinery Co.
1790 Niagara Street, Buffalo, N. Y., U. S. A.

YARD AND SHOP

(*Continued from page* 152)

ARRANGEMENT FOR OUTBOARD CHAMPIONSHIPS

I. New York-New England Inter-Section Regatta.
Middletown, Connecticut, September 20th. Open to drivers who have placed first, second or third in a sanctioned race of the New York or New England Outboard Associations during 1929.
Note: New York and New England Associations will pay expenses of their winners at this regatta to the Divisional Championships at Boston.

II. Eastern Divisional Championships and American Power Boat Association Championship.
Boston, Mass., October 4 and 5, 1929. Open to identical outfits and drivers who have placed first, second or third in an American Power Boat Association sanctioned race in 1929.
Note: The N. C. A. will pay the expenses of boats and drivers who win at this regatta to the Peoria, Ill., Regatta October 12 and 13, 1929. They will also pay the expenses to Peoria of winners at Central and Western Divisional Championships.

III. National Outboard Championships.
Peoria, Ill., October 12, 13, 1929. Open to identical outfits and drivers who have placed first, second or third in any race sanctioned by the American Power Boat Association or Mississippi Valley Power Boat Association, during 1929.

PROMOTIONS IN JOHNSON STAFF

The Johnson Motor Company has just announced three important changes in officials.

The first of these is the promotion of C. D. Van Sickle from the office of Treasurer to Vice President and Secretary of the Johnson Motor Company. Mr. Van Sickle has been with the company since its very beginning, and has seen it grow from little more than an idea to its position of a leader in one of the fastest growing industries in the country today.

Gates Harpel will succeed Mr. Van Sickle in the capacity of Treasurer. Mr. Harpel has long been identified with the Johnson Motor Company in the office of Sales Manager. He, too, has been a long period of service with the company, having been with it for a number of years in South Bend.

A. W. Dailey will take over the position of Sales Manager vacated by Mr. Harpel. Mr. Dailey has been associated with Johnson in various sales capacities for a period of seven years. Previous to his promotion he held the title of Assistant Sales Manager.

WOOD TAKES AIRSHIPS HULL TO VENICE

Gar Wood, after deciding to attend the International Races at Venice, Italy, this summer and to race an outboard at that meeting, has placed an order with Victor Withstandley & Company of New York City for an Airships Aqua Aero outboard hull. For power he will use a racing type Johnson Sea Horse 32 and the expectation is that, with Wood's experience and knowledge of boat racing, the 50-mile outboard mark will be attained.

It is interesting to note that Major Segrave is also the owner of an Airships speed hull, so that the drivers of the world's fastest boat and automobile both use the same type of craft for their outboard activities.

RADIO STAR BUYS NEW CRUISER

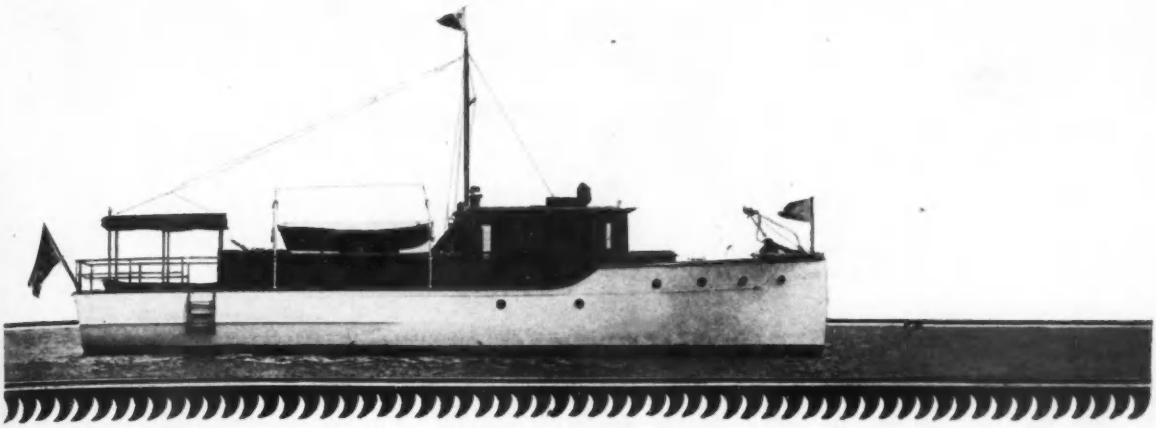
Jack Parker, the popular tenor, was one of the first to purchase a boat in the new waterfront Fleetwing showrooms on Riverside Drive.

Mr. Parker, who is known to millions as one of our leading radio entertainers, now owns a double cabin Fleetwing Standard Forty, a cruiser that has won fame on the water as Mr. Parker has on the air. And soon the singer, whose voice has thrilled nation-wide audiences, will seek thrills of his own and rest from his arduous programs in the cruiser of his choice.

There are few of us, indeed, who have not had the pleasure of hearing Jack's voice over the radio. He plays a big part in many of the favorite commercial hours of entertainment.

Now, as a yachtsman, Jack's choice of boats rivals his choice of songs. His new Fleetwing is a trim looking, luxurious forty-foot cruiser, done in white and finished with mahogany. It has two choicely furnished cabins with separate lavatories, an open bridge deck, an airy, roomy afterdeck, and a power plant consisting of a Fleetwing-Buda engine. The boat is equipped throughout with everything for the comfort, enjoyment and safety of its owner, Mrs. Parker, and their guests.

Advertising index will be found on 3rd last page



Vinyard

50 and 55-Foot
TWIN-SCREW CRUISERS

IT is well known among the initiated that Vinyard Fifty and Fifty-Five Foot Twin-Screw cruisers are comparable only with Custom work of the finest boat yards. But it is not generally known that a Vinyard cruiser may be purchased at a figure much below that for Custom work.

The Vinyard's comfortable and tastefully arranged accommodations include a spacious deckhouse, neatly appointed guest's room, owner's cabin, lavatory with modern sanitary fixtures and shower, and a fully equipped galley with Frigidaire electric refrigerator. Delco water pressure system and Delco electric lighting plant are standard equipment. The fifty-five foot model has a separate dining room forward of the deckhouse. Vinyard cruisers are sold complete with every essential, even to china and silver service for a table of eight.

Twin six-cylinder Sterling or Kermath motors are optional. Speed, 16 M.P.H.

Write Today for Further Particulars

An Enthusiastic Owner Writes:

Mr. W. M. Vinyard,
Vinyard Shipbuilding Co.,
Milford, Delaware.

My dear Mr. Vinyard:
I want to advise you that not one thing did we find that was not working perfectly all the way through.

I again wish to thank you for your many, many courtesies and to hope that one of these days I can again come to Milford and perhaps negotiate for a 75-footer.

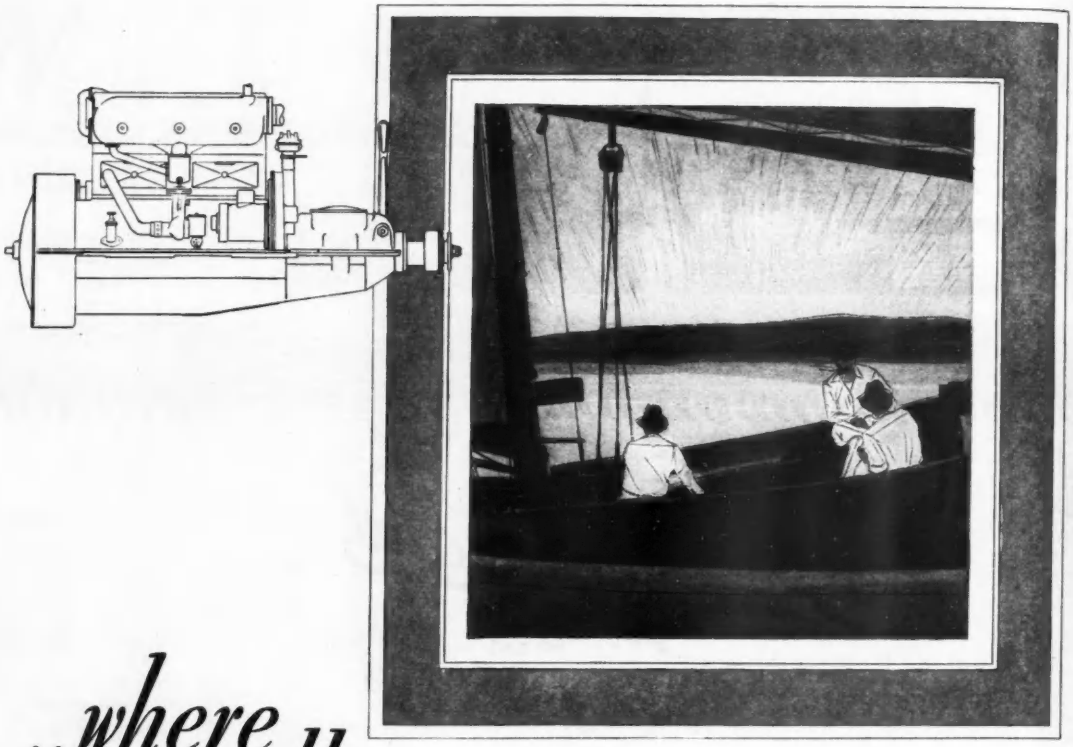
Very truly yours,
R. E. KLAGES.

The spacious deck saloon is large enough for the owner and guests to gather for dancing, bridge games and other entertainment.

VINYARD SHIP BUILDING CO.

Designers and Builders of Yachts and Cruisers of the Highest Class

MILFORD, DELAWARE



..where all men are buddies

BY WATCHING a golfer's expression as he hooks a drive you know why sailing has become such a popular method of entertaining the business guest.

But the sailor has a responsibility too. He must, irrespective of weather, be ready to start and guarantee to land at the appointed time. He must have dependable power.

A Palmer Engine, as the power unit of a motor boat, as the auxiliary in a sail boat, is the solution. Palmer Engines have always been dependable and durable. The new models are light and compact as well. There is a type of Palmer Engine for every type of boat.

If you do not know our local agent write us direct for details.

PALMER BROTHERS ENGINES, INC.

COS COB, CONN.

PALMER

DISTRIBUTORS

New York, N. Y.
89 Third Ave. between 12th and 13th Sts.
Baltimore, Md.
514 E. Pratt St.
Philadelphia, Pa.
631 Arch Street
Portland, Me.
Portland Pier
Boston, Mass.
Rapp-Huckins Co.
59 Haverill St.
Portland, Ore.
Oregon Marine and Fisheries Supply Co.
Norfolk, Va.
Gas Engine & Boat Corp.
Seattle, Wash.
Pacific Marine Supply Co.
Vancouver, B. C.
V. M. Dafoe, 1100 Powell St.
Jacksonville, Fla.
122 South Ocean St.
Tampa, Fla.
Ft. of Whiting St.
Miami, Fla.
B. E. Schubert, 1008 North West 8th St. Road
Biloxi, Miss.
F. B. Kennedy

THE PALMER LINE

YT1—1-cylinder	2 h.p.	F6—6-cylinder	50 h.p.
PNR1—1-cylinder	6 h.p.	NK2—2-cylinder	25 h.p.
PNR2—2-cylinder	12 h.p.	NK3—3-cylinder	35 h.p.
PNR3—3-cylinder	18 h.p.	NK4—4-cylinder	50 h.p.
PNR4—4-cylinder	24 h.p.	NK6—6-cylinder	80 h.p.
ZR1—1-cylinder	7 h.p.	VH—4-cylinder	14 h.p.
ZR2—2-cylinder	18 h.p.	VHL—4-cylinder	20 h.p.
ZR3—3-cylinder	30 h.p.	Little Huskie—4-cyl.	15 h.p.
ZR4—4-cylinder	40 h.p.	Power-Boy Six—5-cyl.	40 h.p.
F2—2-cylinder	18 h.p.	P. A. L.—4-cylinder	25 h.p.
F3—3-cylinder	25 h.p.	Lycoming Straight 8	115 h.p.
F4—4-cylinder	35 h.p.		

Palmer Brothers Engines, Inc., are the retail distributors for Lycoming Marine Motors

Advertising index will be found on 3rd last page

WIN with a WINNER

CHRIS-CRAFT have always been winners in all the standard motorboat events. Smith-built boats have won 10 consecutive Gold Cups, and two Harmsworth Trophies, emblematic of world championship. Chris-Craft are the unquestioned choice of the foremost sportsmen of the day—yet they are so easy to handle that anyone with only ordinary knowledge of a motor car may drive one in complete comfort, and absolute safety.

For 43 years the Chris Smith & Sons Boat Company has been building winners. Chris-Craft have sold three times as many motorboats as all other manufacturers combined. Today, in immense plants covering 74 acres, this famous group of craftsmen makes everything that goes into a Chris-Craft—hulls, engines, upholstery and fittings. Modern straight line production makes possible greater value than any other manufacturer can give. Complete coverage of the field with the 18 beautiful Chris-Craft models makes it possible for you to have any type of motorboat you wish—and still have it a Chris-Craft.

There is only one Chris-Craft, the 25-year motorboat. Call the Chris-Craft merchant today.

CHRIS SMITH & SONS BOAT CO., 388 DETROIT ROAD, ALGONAC, MICH.

New York Factory Branch: 1 West 52nd Street at 5th Avenue

18 Models 22 to 38 feet 30 to 45 Miles an hour
82 to 225 Horsepower 8 to 26 Passengers
$2235 to $15,000

Chris-Craft

World's Largest Builders of All-Mahogany Motor Boats

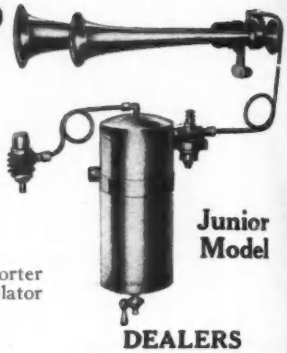
Compressed Air Marine Signal

PATENTED

Made in 15 models and tones for all types of sea, river and lake craft. With curved and straight projectors of polished brass. Operates from pet cock or air tank.

Duplex Model

"STROMBOS"



Junior Model

Your boat deserves the best! Strombos, *the long distance marine signal,* has the appearance equal to its fine performance. Touch the button or cord and its warning or message speeds far ahead, through storm, wind, fog and noise, and the Strombos tone is pleasing to the ear, as the finish is to the eye!

Strombos Junior is primarily for smaller craft, with the same distinctive tone but shorter audible range. Complete, as shown, with magnet and regulating valves, air accumulator and reservoir, bands, brackets and tubing. Chromium plating.

J. THOS. RHAMSTINE* **504 Woodbridge St. E.**

Successor to American Strombos Co. **Detroit, Michigan**

NOTE: The Rhamstine* Strombos is patented. There have been no licenses granted and any air diaphragm horns employing the principle covered in our patents are infringements.

DEALERS

Some territory still open. You will find selling Strombos signals a source of satisfaction to your customers and yourself. Write or wire us today!

Binnacles *and* Compasses

of every size and style are but part of our complete stock of nautical instruments

Send today for illustrated catalog describing these instruments

Compasses adjusted by experts
All instruments repaired

JOHN BLISS & CO., Inc.

Nautical Instrument Makers Since 1835

83 Pearl Street, New York City

Telephone WHItehall 9424

MoToR BoatinG

CAN BE BOUGHT AT YOUR NEWSSTAND

SAY TO YOUR NEWSDEALER

"SAVE ME A COPY"

HE WILL BE GLAD TO RESERVE YOUR

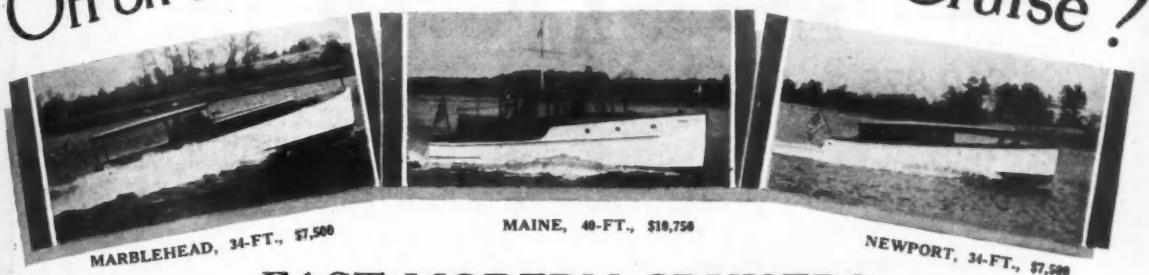
MoToR BoatinG

For You

EVERY MONTH

Advertising index will be found on 3rd last page

Off on a COOL VACATION Cruise ?



MARBLEHEAD, 34-FT., $7,500 MAINE, 40-FT., $10,750 NEWPORT, 34-FT., $7,500

FAST MODERN CRUISERS

available for

IMMEDIATE DELIVERY

STAPLES JOHNSON cruisers offer supreme values at very low prices owing to the fact that "it costs less to build good boats in Maine."

A New England Product by New England Craftsmen to New England Standards assures economy, staunchness, seaworthiness, durability.

STAPLES, JOHNSON & CO.

R. F. D. No. 3, BIDDEFORD, MAINE

NEW ENGLAND REPRESENTATIVES:
Eastern Service Marine Company
780 Commonwealth Ave., Boston, Mass.

NEW JERSEY REPRESENTATIVES:
Power Equipment Company
1421 Atlantic Ave., Atlantic City, N. J.

Pioneer Magnetic Compass

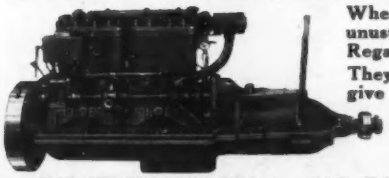
Did you know that at just the speed (around 20 M.P.H.) where the standard nautical compass becomes almost worthless from vibration, the Pioneer Magnetic Aviation type compass functions perfectly? It handles the pounding and vibration of a plane—hydro or aero—with equal unconcern.

Descriptive circular awaiting your request

PIONEER INSTRUMENT COMPANY
756 LEXINGTON AVE. BROOKLYN NEW YORK

For Constant Service There Are None Better Than

REGAL MARINE ENGINES

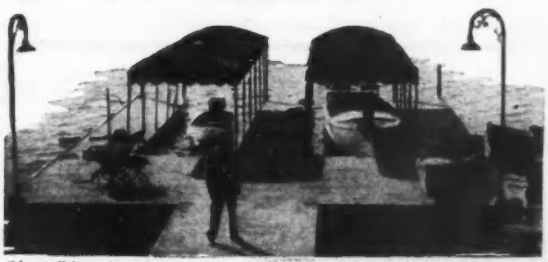


Where service is unusually hard Regals serve best. They are built to give constant service at the lowest cost.

EIGHTEEN MODELS — 2 H.P. TO 75 H.P.

Regal Engines are equipped with high speed reversing gear. Link Belt, silent chain drive for timing gears.

REGAL GASOLINE ENGINE COMPANY
Established 1901
74-82 WEST PEARL ST. COLDWATER, MICH.
Manufacturers of REGALITE, 32-K.W. air-cooled electric lighting plant. Write for particulars.



Of striking beauty and staunch construction these Artistic Steel Floats are designed for use as permanent moorings. They may be constructed in any size and anchored in any harbor.

ARTISTIC STEEL FLOATS

WALSH BUGGBEE CO., INC.
Engineers, Manufacturers and Builders Artistic Steel Floats and Docks

New York City:
Mansfield Hotel, 12 West 44th Street
Telephone: Vanderbilt 2233

Factory Office:
206 East Hanover St., Trenton, N. J.
Telephone: Trenton 6257-8

FLEETWING 40

$10,875

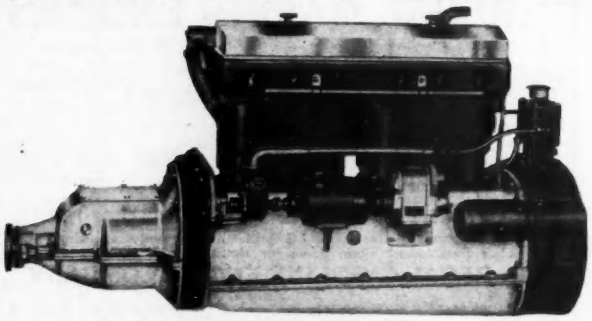
To the Showroom—

153rd Street and Hudson River
New York City
Seventh Avenue Subway to 157th Street
Auto entrance at 158th Street, under Viaduct
Telephone Billings 7445

The striking beauty of its lines, luxurious appointments and the sturdy finished excellence of its construction, makes the Fleetwing Forty the outstanding cruiser of the day. In its choicely decorated cabins, two toilets, bridge deck and airy after-deck, you will find ample accommodations for seven persons.

An exclusive Fleetwing feature, the spoon bottom construction, assures smooth riding in any weather. The power plant, a vibrationless 115 H.P. Fleetwing Buda, gives a speed of 14 miles per hour.

FLEETWING YACHT AND SHIPBUILDING CORP.
FRANK V. BORICK, President



BRENNAN DeLuxe Six
Four Sizes—60 H.P. to 125 H.P.

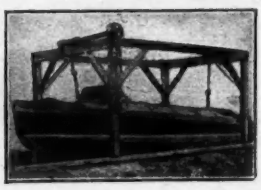
A Fine Motor for Fine Boats
Brennan DeLuxe Six

FOR consistency, maximum efficiency and economy in power plants for runabouts, fast cruisers or express commuters, single or twin-screw, you can select no finer power plant than the BRENNAN DeLuxe Six; Four sizes, 60—90—100 and 125 H.P. Brennan superior marine engines are available in eleven models both four and six cylinders, 15 H.P. to 200 H.P. for boats up to 75 feet.

Boat Builders and Engine Dealers! Send now for our Attractive Trade Proposition.

BRENNAN MOTOR MANUFACTURING COMPANY
500 East Water Street Syracuse, New York
Reliable Since 1897
Write today for catalogue.

ALGONAC BOAT HOISTS



Why leave your Boat in the water when you can have one of these Hoists within a few days and at low cost?

Hand . . and . . Electric

MONNIER BROS., INC. ALGONAC, MICH.

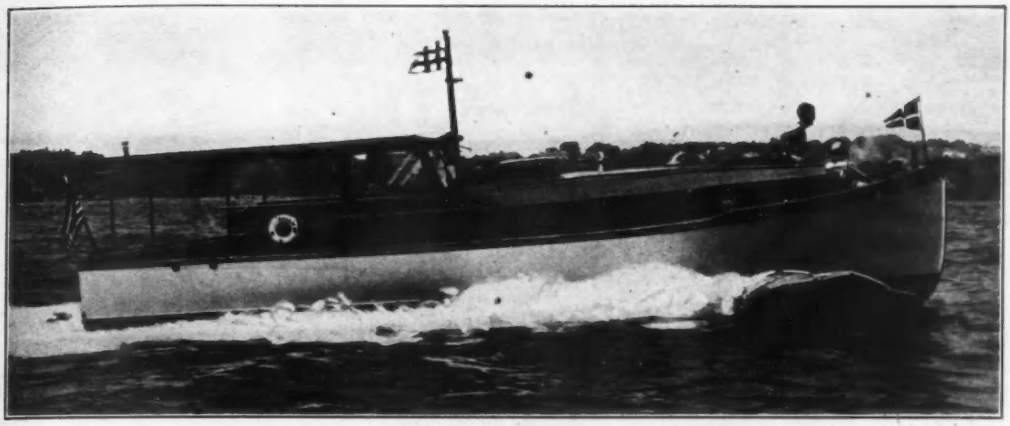
Represented by the Leading Boat Dealers in the Following Cities:

Chicago, Ill.
Lyon, Miss.
Oshkosh, Wisc.
Galveston, Texas
Milwaukee, Wisc.
$115 to $250.
Minneapolis, Minn.
Calumet, Mich.
Miami Beach, Fla.
Toledo, Ohio
Cleveland, Ohio

We still have some very good territories open for live dealers

Advertising index will be found on 3rd last page

WHEELER "PLAYMATES"



Standard 36-foot WHEELER "PLAYMATE." Powered with 200 h.p. Sterling Petrel. Speed 21 m.p.h.

There's a famous WHEELER "PLAYMATE" to meet your requirements, no matter what they may be. There's a notable list of WHEELER "PLAYMATE" owners who have nothing but good words for their boats. Just the type of craft for the man who has only time for pleasure. WHEELER "PLAYMATES" are noted for speedy, seaworthy performance and ease of handling. The Wheeler Line is complete from 26 to 40-foot lengths. Speeds up to 30 m.p.h. and prices ranging from $2975.00 to $9000.00.

WRITE FOR CATALOG "A"

WHEELER PLAYMATES

WHEELER SHIPYARD

Coney Island Creek & Harway Avenue, Brooklyn, New York

Telephone: BENsonhurst 5091 and 8550

NOW READY

Outboard Rules for 1929

and

How to Run an Outboard Regatta

Price 25 cents

MoToR BoatinG

959—8th Avenue, N. Y. City

Old Man Joe's
HARTMANN
Universal Joints

New manufactured and sold to the marine trade by Old Man Joe exclusively. Quick shipments from complete stock at all times. Send for folder on the line.

The Snow & Petrelli Mfg. Co.
19 Fox St., New Haven, Conn.

Strong Long-Lived Dependable

Large Tapered Bearings

Topping Special Closet

Above or below waterline.

Prices on application. ***Discount to boat builders.***

WITH NEW CLEANOUT PLUG IN BASE.

157 Varick St., New York

Crossing the Finish Line

The Winning Craft and Driver

Faybow Hydroplane Wins Outboard Marathon and Breaks Distance Record

"Miss Mystery," a Faybow Static model hydroplane, driven by Leo Davids, wins 68-mile Finger Lakes Outboard Marathon and establishes new World's Record for that distance

AGAIN a FAYBOW "Static" Model Hydroplane, powered with a Johnson Sea Horse 32 Outboard Motor, demonstrated its right to the title of "the fastest hydroplane afloat"—by winning the Finger Lakes Outboard Marathon—covering the 68-mile Seneca Lake course between Geneva and Watkins and return in the record-breaking time of 1 hour, 38 minutes, 25 seconds, an average of 41.4 miles an hour for the total distance. 48 starters competed in the event.

In the same race another "Faybow Static" hydroplane, driven by H. E. Hovey, finished third in 1 hour, 47 minutes, 27 seconds.

Faybow Models never fail to distinguish themselves when put to the test.

Other notable FAYBOW Models are the 16 ft. Middy "Aristocrat of Outboard Craft," and the new luxurious 21-ft., 40-mile Runabout.

Faybow Matchless Marine Engines include the 100 H. P. "Conqueror," the 60 H. P. "Challenger," and the 20 H. P. "Gobest."

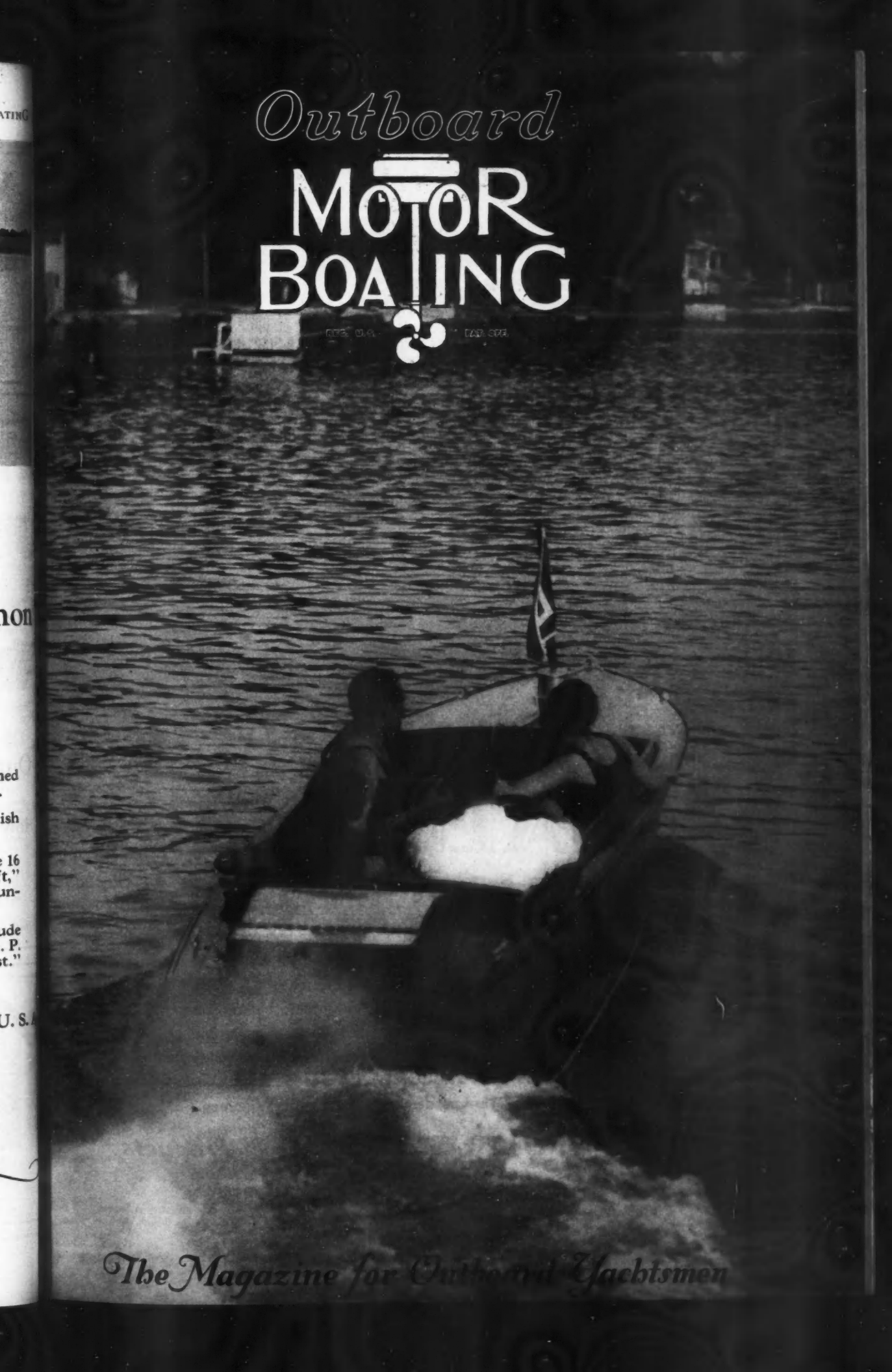
Write for full information—Ask about our Easy Payment Plan

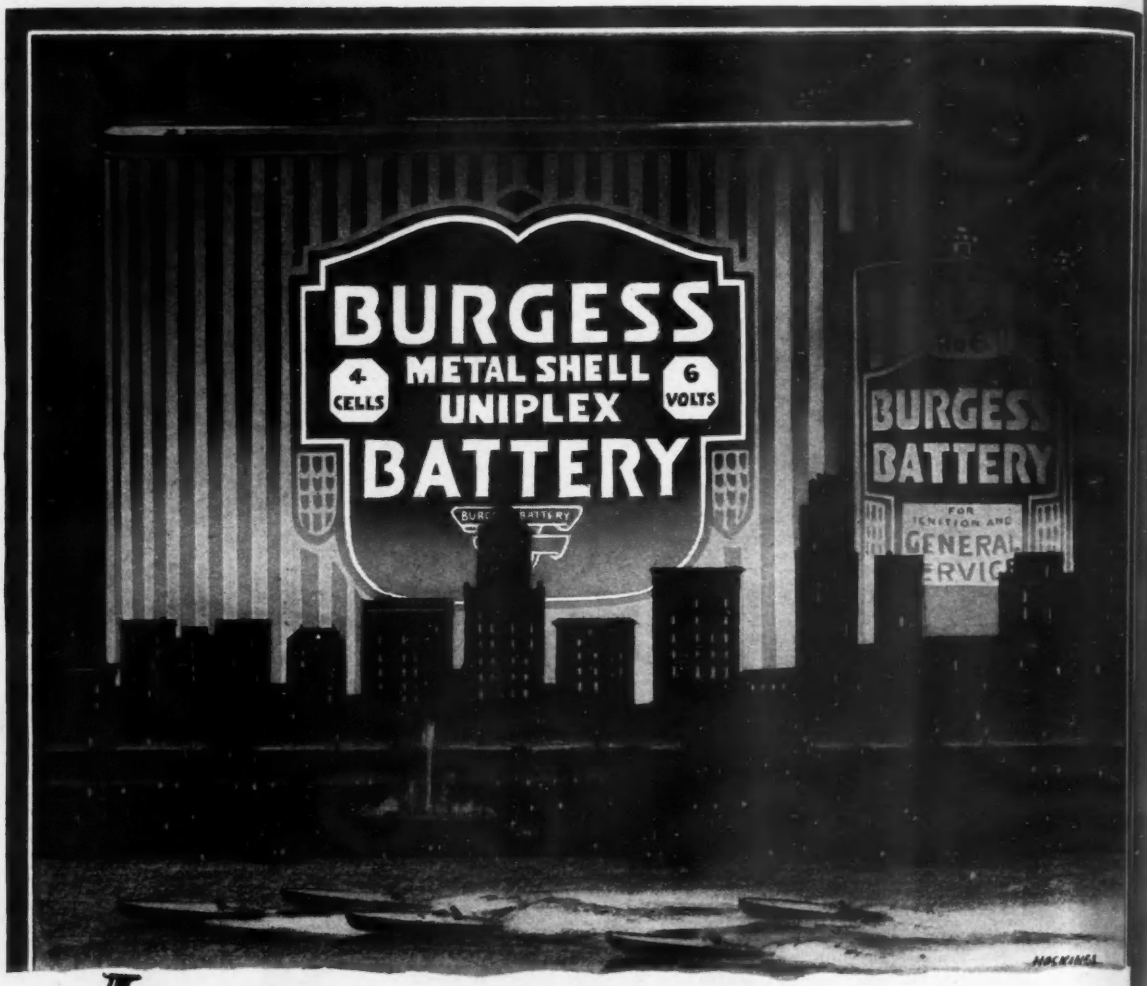
FAY & BOWEN ENGINE CO. - - - - 104 Lake Street, Geneva: N. Y., U. S. A.

FAYBOW

MARINE ENGINES AND POWER BOATS

Advertising index will be found on 3rd last page


Outboard
MOTOR
BOATING
The Magazine for Outboard Yachtsmen



It CHALLENGES

Any Dry Battery, of Equal Size . . . to Equal Its Capacity Power, Length of Service, Dependability and Uniformity

Uniplex
Armored by a steel jacket. Weather-tight and shock-proof.
6-volt size **$2.30**
7½-volt size **$2.70**
9-volt size **$3.25**

No. 6 Dry Cells
—for general ignition service
45c

Burgess Uniplex Ignition Batteries are the foremost choice of speed-boat champions. Time, experience and results have proved them the most dependable and the most reliable . . . the best that can be had. The qualities that make these batteries the choice of champions are the qualities most vital to pleasure and enjoyment in all motor boating. Insist on Burgess Uniplex Ignition Batteries.
BURGESS BATTERY COMPANY, General Sales Office: Chicago.
In Canada: Niagara Falls and Winnipeg.

Other **BURGESS** ***Products***

Advertising index will be found on 3rd last page

PEPPING UP AN OUTBOARD

Tricks and Kinks that Give More Power

By DICK COLE

IT IS little wonder that the owner of an outboard motor several seasons old looks askance at the announcements of the current models. There he sees a motor the same bore and the same stroke as his 4 h.p. kicker, but the new motor is rated at 6 h.p. A fifty percent increase in power! He may be inclined to be skeptical, but the increase in power is a reality, nevertheless.

New designs and new mechanical features have brought about a much higher speed motor. Revolutions per minute must be considered when computing horsepower; in fact, horsepower is in direct proportion to revolutions per minute. So, if the 2000 r.p.m. motor of yesterday was 4 h.p., the same motor today at 3,000 r.p.m. would be 6 h.p. Some of the present-day motors are capable of an efficient speed of 4500 revolutions per minute, on which basis the 4 h.p. motor of several years ago would be a 9 h.p. motor today.

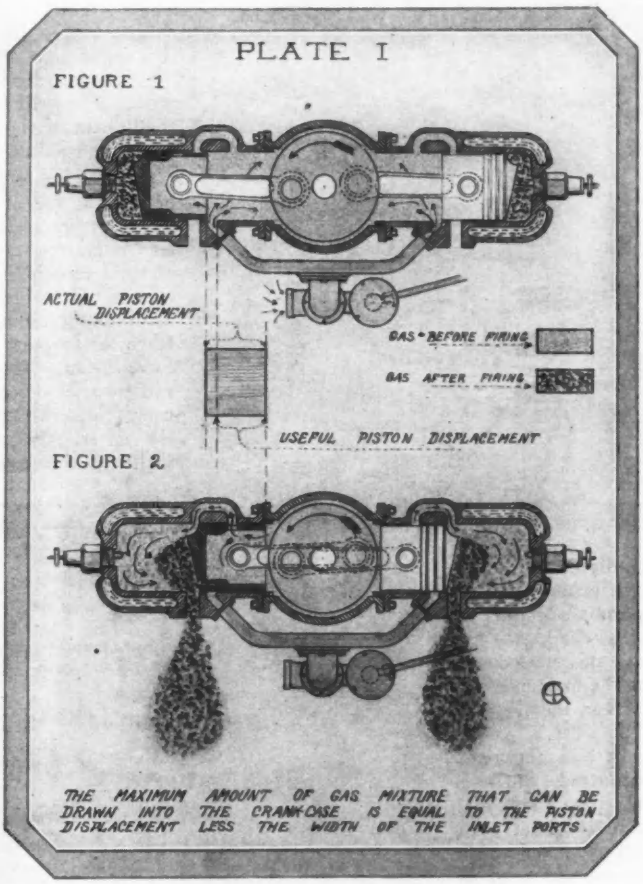


PLATE I
FIGURE 1
ACTUAL PISTON DISPLACEMENT
GAS BEFORE FIRING
GAS AFTER FIRING
USEFUL PISTON DISPLACEMENT
FIGURE 2
THE MAXIMUM AMOUNT OF GAS MIXTURE THAT CAN BE DRAWN INTO THE CRANK-CASE IS EQUAL TO THE PISTON DISPLACEMENT LESS THE WIDTH OF THE INLET PORTS

While a number of factors have contributed to this increase in motor speed—incidentally, in power—the salient factor is the quicker handling of a larger volume of gas. The two cycle type motor is employed almost exclusively for outboard use. In this type the gas mixture is first sucked into the crank case and compressed; then expanded into the cylinder and again compressed; exploded and expanded; and then ejected from the cylinder by the entry of a fresh charge. There is considerable friction and retardation attendant upon this multiple handling of the gases, which has limited the speed which the motor can attain.

Just as there are variations in the design of automobile motors—L head, overhead valves, slide sleeves—so there are variations in the design of the two cycle outboard motors: the two port, the three port, and the four port motors. This season sees the advent of still another type, a combination of the two port and the four port motor, using a mechanically operated rotary valve to admit the gas mixture to the crankcase. The rotary valve construction allows a very large, unimpeded opening for the gas mixture to enter the case. Furthermore, this valve is open throughout the entire suction stroke. Rotary valve, two cycle motors have attained an efficient speed of 4500 revolutions per minute, which proves conclusively that quicker handling of the gases is the outstanding factor to increasing the speed—the power—of an outboard motor.

However, the fitting of a rotary valve is not necessary to increase the power of some of the earlier motors. The most prevalent types of outboard motors are the three and four port design. Plate I shows a horizontal cross section of a four port motor. Fundamentally the three port and four port motors are the same; the only difference being in the method of conducting the gas mixture from the crank-case to the cylinders. The characteristic peculiar to these types is the method of admitting the gas mixture to the crank-case. On the outward stroke of the pistons a partial vacuum is created in the crank-case. When the pistons have nearly reached the end of the stroke, the bottom rims of the pistons uncover ports and permit the inrush of gas mixture from the carburetor.

It is obvious that as the motor gains speed the period of opening of the port lessens in proportion. The mixture to the crank-case is stinted, and finally a balance is reached, which limits the speed of the motor. Assuming that a full charge could be admitted at high speed, the maximum volume would be less than the piston displacement, because the width of the ports must be deducted from the length of the piston stroke in computing the useful piston displacement. (See Plate I.)

The two port motor offers a remedy for this condition, but at the same time adds a fault of its own. In

the two port motor, the ports between the crank-case and the carbureter are eliminated, and an automobile check valve is employed instead.

By this method, instead of the gas mixture being shot into the crank-case during the brief opening of the ports, it is sucked in continuously during the outward travel of the pistons. However, of necessity, there must be some tension on the valve spring, so the loss of gas mixture in overcoming this tension is probably about equal to the loss sustained by the width of the ports in the three or four port type motors.

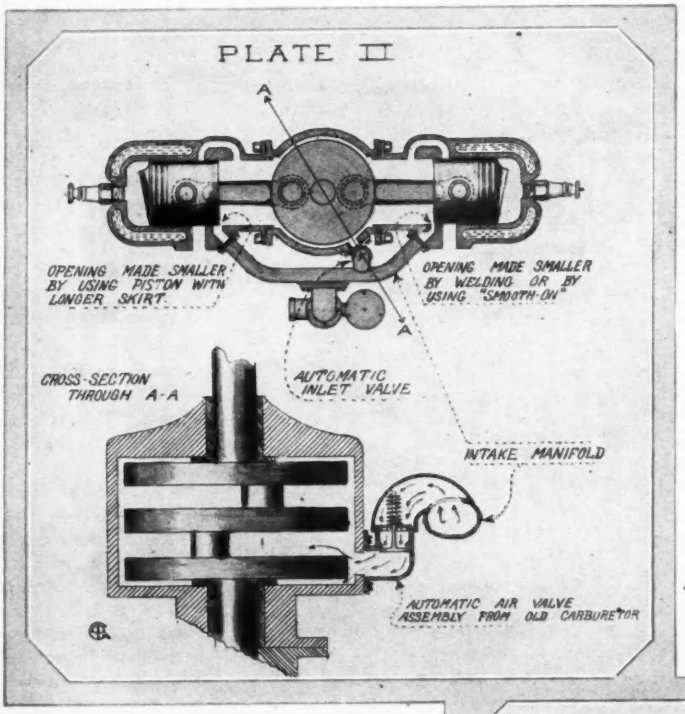


PLATE II
A
OPENING MADE SMALLER BY USING PISTON WITH LONGER SKIRT
OPENING MADE SMALLER BY WELDING OR BY USING "SMOOTH-ON"
A
CROSS-SECTION THROUGH A-A
AUTOMATIC INLET VALVE
INTAKE MANIFOLD
AUTOMATIC AIR VALVE ASSEMBLY FROM OLD CARBURETOR

A combination of port and automatic valve will give a marked increase in power to any outboard motor. (See Plate II.) The width of opening of the inlet ports can be made much more narrower by the use of pistons with longer skirts, or by partly closing the ports by welding or with Smooth-On, thereby increasing the useful piston displacement. And the combined method of gas entry permits a larger volume of gas mixture to enter the crank-case more quickly. The result is increased motor speed; increased power.

The owner of a three or a four port motor can easily install an automatic valve. At any automobile wrecking yard there are bins full of antiquated carbureters fitted with automatic air valves. These can be bought for their value as old metal. On some of these carbureters the air valve assembly is attached to the body of the carbureter with screws and is readily removable.

A dash-pot is usually attached to the air valve to prevent sudden opening and fluttering of the valve. This must be removed, leaving merely the air valve and its component parts. A hole is drilled in the crank-case at some convenient point and the air valve assembly is screwed to the case over the hole. The face of the assembly probably will have to be shaped to fit the curvature of the case, and gasket material must be used at the joint to make it air-tight. An elbow or length of flexible metal tubing is attached to the air entry of the valve assembly and connects with the intake manifold.

In conjunction with installing the automatic valve, the openings of the inlet ports must be made smaller. The simplest way to do this is to fit pistons with longer skirts. However, care must be taken that the dimension of the new pistons from the center line of the piston pins to the top remains the same. An experienced welder can weld a section of a piston ring to the rim of the pistons to lengthen the skirts where they uncover the ports.

The design of some motors will not permit the use of longer pistons, as they would strike against the counter-balances on the crank-shaft on the inward stroke. In this case it is necessary to close the opening of the ports. This can be done by building up metal with an acetylene torch, or by partly closing the ports with Smooth-On. The latter method is a rather tricky job. The directions for using Smooth-On should be followed to the letter. No fixed dimension of the width of the ports can be given to conform to all motors, but it is safe to close the ports at least one half.

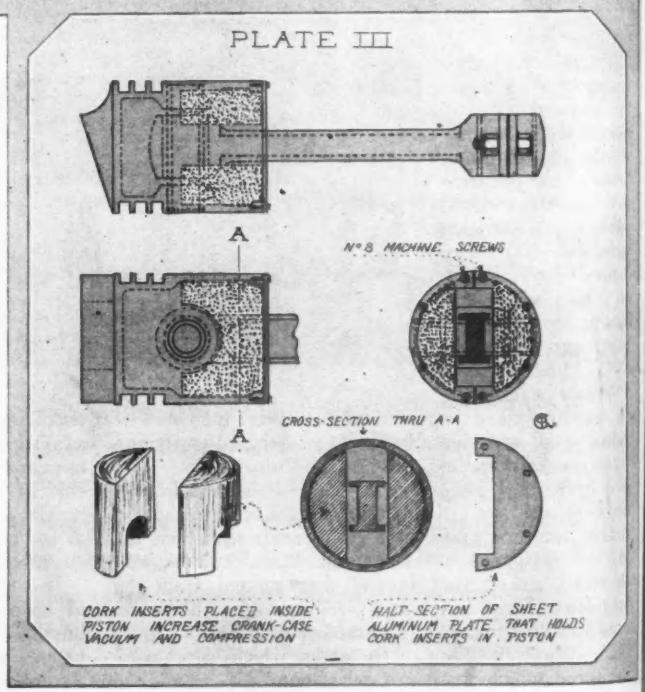


PLATE III
A
N°8 MACHINE SCREWS
A
CROSS-SECTION THRU A-A
CORK INSERTS PLACED INSIDE PISTON INCREASE CRANK-CASE VACUUM AND COMPRESSION
HALF-SECTION OF SHEET ALUMINUM PLATE THAT HOLDS CORK INSERTS IN PISTON

Invariably the installation of the automatic valve in conjunction with the narrowed ports gives considerable added power to an outboard motor. In some cases it will increase the motor speed by 500 revolutions per

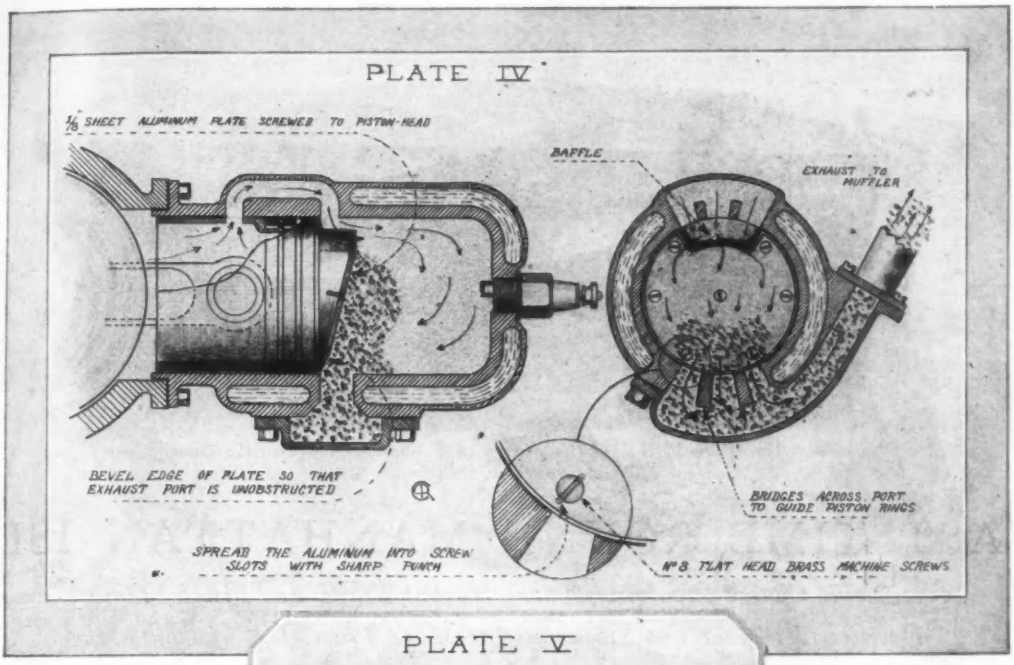
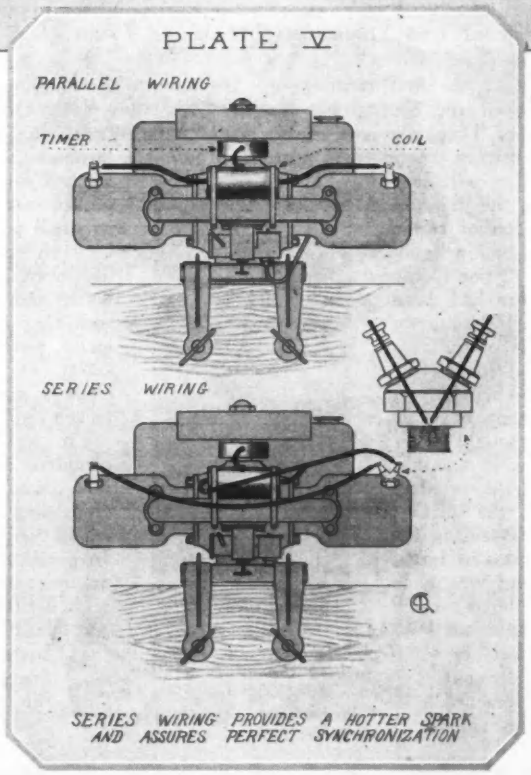


PLATE IV
1/8 SHEET ALUMINUM PLATE SCREWED TO PISTON-HEAD
BAFFLE
EXHAUST TO MUFFLER
BEVEL EDGE OF PLATE SO THAT EXHAUST PORT IS UNOBSTRUCTED
BRIDGES ACROSS PORT TO GUIDE PISTON RINGS
SPREAD THE ALUMINUM INTO SCREW SLOTS WITH SHARP PUNCH
No 8 FLAT HEAD BRASS MACHINE SCREWS



minute if well installed.

Another little trick can be applied to many motors and will serve as a power booster. This is to place cork inserts inside the pistons. Plate III explains how this is done. It is essential to the construction of a two cycle motor that the volume of the crank-case be as small as possible. The crank-shaft is designed to displace as much space as possible; the pistons travel into the crank-case as far as possible. The purpose of this compactness is to create the maximum range of vacuum and compression in the crank-case, so that the gas is drawn in more quickly on the intake stroke. It is also more highly compressed and shot more snappily into the cylinders. The cork inserts will displace still more space. The addition of only four or five cubic inches displacement often will add 50 to 100 revolutions per minute. The cork inserts should be as large as possible, but should not obstruct the oil hole to the piston pin, nor should they touch the under side of the piston-head, as this part becomes hot enough to char the cork.

Boosting the cylinder compression is an old stunt. Sometimes it gives a little more power, and sometimes only pre-ignition and knocks. Some of the late model outboard motors have removable cylinder heads, in which case it is an easy matter to substitute a high compression head. On other motors it is necessary to substitute the pistons or place a thin plate on the tops of the present ones. This can be done as shown in Plate IV. However, these plates should not be applied except as a last resort. Most outboard motors are designed to run at maximum efficient compression pressure at sea-level and will not respond to compression boosting in tidal waters. However, above 5,000 foot elevation, the average motor will develop more power with increased compression.

When fitting a plate to the piston-head be sure it does not obstruct the ports. Do not change the shape of the baffle in any way. Use a fairly large number of No. 8 flat-head, brass machine screws, and pein the aluminum into the slots so that the screws can not loosen.

Another way to increase the power is to rewire the spark-plugs in series. (See Plate V.) This system requires a series spark-plug. These are not used very extensively nowadays, but can be picked up at an auto wrecking place or from an airplane supply house. These will be seven-eighths S.A.E. thread and must be turned down and rethreaded if the outboard motor has irregular threads. It is said that a hotter spark can be had by putting spark-

(Conttinued on page 186)

Big Ben driven by Harold Chapman with a Johnson Quad won the Round Manhattan Race in 58 minutes' time

FAST TIME ROUND MANHATTAN ISLE

Difficult Course Involving Heavy Harbor Traffic and Much Floating Driftwood Proves Too Strenuous for More Than Half of Contestants

SUNDAY, June 30th, saw the first running of the new outboard race in the contest for the valuable Herbert Pulitzer Trophy over a course of 29½ miles around Manhattan Island. As anticipated by all those familiar with the condition of the waters in the Hudson and East rivers, the heavy harbor traffic and floating drift and debris took a heavy toll among the contestants. Prior to the race, the number of starters had been variously estimated at from 100 or more to as high as 200. The day of the race brought forth a choppy condition on the river due to a brisk northwest wind blowing against the tide and many of those who were prepared to start thought better of it and did not. As far as anyone was able to determine, some fifty-six or fifty-seven boats actually crossed the starting line. It was impossible to obtain an exact count in the charging mass of boats, smoke and spray. An attempt was made to check the number of boats which passed through the draw span at the Spuyten Duyvil bridge but by this time some were already out of the running and never reached this point, only a few miles from the start, so that the figures are only an approximation.

The perpetual trophy presented by Herbert Pulitzer for annual competition around Manhattan

Walter Petersen, driving a Bossert Pirate with an Evinrude engine, finished second

The New York Outboard Motor Boat Association actually conducted the contest and used for this purpose the grounds and facilities of the Colonial Yacht Club at 152nd Street. The Coast Guard was ably represented by a fleet of its small patrol boats and the New York City police department assisted in picking overturned contestants out of the water and salvaging their outfits. It is well that in a contest of this kind adequate provision is made to insure the safety of unfortunate drivers as the chances are that many will have to be picked out of the water.

Of the 57 starters, 25 were able to complete the course and the remainder who came straggling back to the club from time to time had wonderful tales to tell of their adventures around this course. In practically every case, their difficulties or overturning were due to encounters with driftwood which varied in size and bulk from railroad ties to packing boxes and often heavy material floated just below the surface of the water so that it was not possible

(*Continued on page* 184)

The Choice of Champions

OILZUM MARINE VICTORIES

April 29—Albany-New York Outboard Marathon.
Broke all previous records. (Dunnell).

LAKE QUINSIGAMOND

May 29—Class B, Division 2, 1 mile, American Record, (Warner).
May 30—Class D, Division 2, 5 mile, American Record, (Stearns).
May 30—Class E, Division 2, 5 mile, American Record, (Dunnell).
May 30—15 mile free-for-all, speed 40.32 m.p.h. (Dunnell).
June 8—Grand-free-for-all at Wakefield, Mass. (Eldredge).
June 30—Class C "Around Manhattan" outboard motor race, (Peterssen).

Oilzum has lubricated the motors of many record breaking boats. Under the most severe tests to which oil can be subjected, Oilzum has proved to be ideal for marine use.

Boat owners are cutting maintenance costs and improving motor performance by using Oilzum — the cream of 100% pure Pennsylvania oils. Every quart meets our standard.

Upon request we will gladly give dealers full information concerning prices, specifications and territorial protection.

Manufactured by The White & Bagley Company, Worcester, Mass.

Oilzum MOTOR OILS LUBRICANTS

Oilzum

America's Finest Oil

M. Rosenfeld

Jersey Jane, driven by Louis Smith with an Evinrude engine, won the Class D, Division 1 event

ALBANY SETS NEW RECORDS

A Successful Series of Races for 151s and Outboards on the Hudson

By BRUNO BECKHARD

IT is more or less a matter of tradition that a Gold Cup boat is never quite ready to run until about two weeks after the Gold Cup Regatta and it is equally a matter of tradition that Albany is all set for a regatta from July to October, abandons the idea in December, comes back strong in late April or May and has a grand party the first week in July.

It is likewise reasonably certain that if you race at Albany once you will come back to race again. This is not only because Albany outdoes itself to make you feel at home, but because the course is unusual. Perhaps the best word to describe it is sporting—although that isn't the word the drivers use. That the course is fast is certain, but why it is fast is not so clear. Even when apparently smooth it has some peculiar cross currents that refuse to be ignored—and when it kicks up, as it did this year, it has a real kick to it.

There were no cruiser races this year and only one runabout event. The program went almost entirely to the 151s and the outboards. A fine fleet of 151s provided plenty of conversation and six closely contested heats. When you get Commodore Hammond, Chris Ripp, Cliff Hadley, Elmer Johnson, Gibson Bradford and the rest together there is sure to be something doing—although Ralph Sheldon's Little One actually ran off with the big money. Who cares? Didn't Cliff build 'em all and didn't Chris invent 'em—and isn't it all in the family? Sure.

The outboards made some very good time, but owing to the fact that the events were split up to provide for both Division I and Division II drivers there were not always enough entries to entitle the speeds to any official recognition. Division I honors were very equally divided between Walter Peterssen of Brooklyn and Louis Smith of Albany in Class C and between Smith and Harold Chapman in D. Chapman succeeded in establishing a Class D, Division I competition record.

The family outboard runabout race lacked sufficient starters to make it interesting. In theory such an event should bring out a good field, in practice it rarely does.

The Division I races were scheduled for the morning, Division II for the afternoon—which gave Division II a poor break on the weather, but did not prevent some fine competition. The 10-mile free-for-all on the second day was postponed in the hope that the south wind would moderate—but if anything, it got worse, so that when the race was finally started it had to be called off at the end of the second lap. This, it later turned out, was one of those lucky breaks for the drivers, inasmuch as the winning boat sank as it reached the float and the second boat overturned just after it left the course. It is rather interesting to note that in spite of bad weather only two boats upset on the course during the entire two days' program, and both of these went over on straightaways. The single buoy turns seemed to work out very well with this year's motor speeds.

The summary gives ample proof that the field was of high caliber.

Mile trials were held on the 5th and 6th over a nautical mile course, qualifying the records for International registration. Harold Chapman, driving in Division I, Class D, made the first record. Then Walter Peterssen set up a Class C, Division I record, followed by Helen Hentschel in Division II—the latter run finally breaking the jinx that has kept Class C below the 40 statute mile mark. Various drivers failed to go the required distance or to make the required time. As a matter of fact all the drivers in the mile trials deserve unusual credit, for the course was full of hidden drift aggravated by a lot of straw dumped from an unloading banana boat upriver, which eventually made us call off the event, although three or four more records could easily have been chalked up. Leo David, whose outfit should have hung up a really high mark in Class D, Division II, was tripped three times by straw before he finally gave up the attempt.

The physical arrangements at Albany add much to the pleasure of this annual event. The course is near the center of town with ample space for spectators—and plenty of them. The basin back of the clubhouse is equipped with special stalls where the racing boats

Competition among the 151-inch hydroplanes was fast and furious. Little One proved the winner

can be conveniently tied up. Basin, club and judges' barge are hooked up by telephone. This year bombs were used to replace the usual preparatory gun and this was found to be a real improvement. The test mile is on a separate telephone line that gives a double check at all times.

The local committee, headed by Comm. George DuBois and Ray F. Delehant, were untiring in their efforts to make everybody happy and Mrs. Berry, as always, saw to it that everyone had plenty to eat whenever they wanted it. I don't know how she does it—but I wish there were more like her.

Speaking of the ladies, Albany brought together Alice Hallowell, Mrs. Stearns, Merion Hasbrouck and Helen Hentschel, which is what we might call a fair field.

The summary follows:

WINNERS AT THE ALBANY REGATTA

151 LIMITED

Little One	Ralph Sheldon	.....
Miss Meadowmere II	Chris Ripp	.....
Bay Head	Alfred Gouvett	.....

151 UNLIMITED

Little One	Ralph Sheldon	.....
Bay Head	Alfred Gouvett	.....
Thunderbolt	Gordon Squier	.....

OUTBOARDS—*Class A, Div. II*

Cute Craft Herself	A. T. Buffinton	Lockwood
Miss Peggy	John Gill	Lockwood

Class B, Div. I

Peggy Herself	Wm. Demosh	Johnson
Zip	K. Darrow	Lockwood

Class C, Div. I

Pirate Kid	Walter Peterssen	Evinrude
Jersey Jane	Louis Smith	Evinrude

Class D, Div. I

Jersey Jane	Louis Smith	Evinrude
Big Ben	Harold Chapman	Johnson

Unlimited, Div. I

Big Ben	Harold Chapman	Johnson
Pirate Kid	Walter Peterssen	Evinrude

RUNABOUT—*Free-for-All*
Winner—M. L. Jarrett
Class B, Div. II

Rascal	Earl Gresh	Johnson
Queen B	Alice Hallowell	Caille

Class C, Div. II

Little America	Hub Myers	Caille
Thisbe	Helen Hentschel	Evinrude

Class D, Div. II

Miss Mystery	Leo Davids	Johnson
Blackie	L. E. Prestoh	Johnson
Zip	Russ Stearns	Johnson

Unlimited

Blackie	L. E. Prestoh	Johnson
Big Ben	Harold Chapman	Johnson
Skysled	J. C. Smith	Johnson

Commodore Trophy

Little America	Hub Myers	.....

Family Runabouts

Sea Horse	A. T. Buffinton	.....
Miss Albany	Gordon Jacobs	.....

RELAY RACE
Demosh, Peterssen & Chapman

GRAND FREE-FOR-ALL

Sea Horse	A. T. Buffinton	.....
Skysled	J. C. Smith	.....
Jersey Jane	Louis Smith	.....
Big Ben	Harold Chapman	.....

NAUTICAL MILE TRIALS
(Completed runs only)

Harold Chapman	D	I	Big Ben	38.089	43.89 *
Walter Peterssen	C	I	Pirate Kid	34.045	39.209*
Helen Hentschel	C	II	Thisbe	34.816	40.09 *

Big Ben, driven by Harold Chapman, winner of the Round Manhattan race, won the Unlimited, Division 1 race with a Johnson Class D engine

27 Out of 29 Lap Prizes Won by Outboard Motors Corporation Motors

The prizes at Peoria also included lap trophies for the first boat to finish the first lap and the first boat in each class to finish each 10 laps from ten to seventy inclusive. Twenty-nine possible lap prizes with Evinrude taking 7, Lockwood 7 and Elto 13 — twenty-seven in all.

Advertising index will be found on 3rd last page

RST

in every class with stock motors
200 mile Peoria, Ill., 4th of July Marathon

PEORIA, with its 2½ mile water track. Peoria, where marathons *are* marathons. Peoria, where motors, boats and men achieve to survive the world's greatest annual test of *speed with reliability*. Peoria, the world's greatest proving ground for outboard motors, just as the Indianapolis Speedway is for cars!

There, on July 4th, three makes of outboards divided *all* honors in every class with stock motors. The victors were Lockwood, Evinrude and Elto . . products all of the Outboard Motors Corporation which represents the widest, longest experience in the designing of outboard motors of all types, all sizes and for all purposes.

You who are now selecting your outboard will remember Peoria. And your Evinrude, Lockwood or Elto, throughout the years, will *keep you* remembering it. See your dealer now.

OUTBOARD MOTORS CORPORATION
OLE EVINRUDE ▾ PRESIDENT ▾

LOCKWOOD DIVISION, Jackson, Mich. See Page 187
EVINRUDE DIVISION, Milwaukee See Page 286
ELTO DIVISION, Milwaukee See Page 61

Start of 200-mile marathon

PEORIA OPENS FIRST PERMANENT WATER TRACK

Two Hundred Mile Outboard Marathon on July Fourth Under Auspices of the Mississippi Valley Power Boat Association

AT Peoria, Illinois, on July 4, the first attempt in this country at a permanent marine race track was given a trial. Except for threatening weather, which kept the size of the crowd down, the attempt went down into history as a big success. Sponsored by the Mississippi Valley Power Boat Association and the Mississippi Valley Water Track, Inc., headed by Gordon C. Gillies, plans had been worked out well in advance which, when the time of the tests arrived, proved beyond doubt that a permanent marine race course can be made a financial success and that the American public will become as keenly interested in the right kind of motor boat racing as they have been in motor car racing for many years.

The event, a 200-mile outboard marathon, attracted entries from far and wide, including many of the best outboard drivers in this country, in spite of the fact that there were many other major outboard events and hundreds of minor races throughout the country on the same day. Given another year to work up interest and publicity in this permanent marine track, the July fourth event is bound to be even a greater success and overshadow anything which the Mississippi Valley Power Boat Association has ever scheduled.

The course, 2½ miles in length, is a permanent one, with three turning buoys at each end and with the moorings for these buoys put down to stay. Thus the course will be available for use at all times, for races, trials or for the testing of boats or motors by owners or manufacturers. This course is laid out in sheltered waters of the Illinois river, at Peoria, its location being such that wind or rough water are seldom a factor. Along the shore, close to the course, there is arranged a series of pits. Each driver of a boat in a race is assigned to a certain pit and here it is that he makes his headquarters. Fuel and other supplies are available at the pits and with the facilities of the Club House of the Illinois Valley Yacht and Canoe Club also close at hand, this makes a layout hard to surpass anywhere. The arrangements for spectators also are of the best, as thousands can be seated close to the race course on a temporary grandstand which is readily erected for each event and removed after the races have finished.

A corner of one of the boat pits

The 200-mile

(*Cont. on page* 192)

Precision!
CONSOLIDATED OUTBOARD TACHOMETER

KNOW your R.P.M.'s accurately! They detect the slightest falling off in engine performance. They reflect any carburetor misadjustment, poor ignition, fouled spark plugs, improper gas and oil mixture or any other engine ailment that retards engine efficiency.

Get a Consolidated Outboard Tachometer. It is designed particularly for outboard motors. It employs the famous Jones movement used in finely-adjusted aviation and marine instruments. The large easily readable dial is enclosed in a polished brass waterproof case with heavy plate cover glass. The motor attachment is of a special right-angle type running on ball bearings. An exclusive Consolidated feature is six feet of braided bronze flexible tubing with special process music wire cable furnished with each tachometer. A special mounting plate for attaching instrument to dash, allows for proper reading angle adjustment and removal of instrument when boat is not in use.

ACTUAL SIZE

Dial and right angle motor attachment are shown in actual size. Six feet of cable is furnished with each tachometer.

PRICE $30.00
Complete

DEALERS

The rapid growth during recent months in the demand for Consolidated marin: instruments makes it essential that more Consolidated dealers be appointed. Your territory may still be open. For complete details write immediately.

CONSOLIDATED INSTRUMENTS

CONSOLIDATED INSTRUMENT CO. *of* AMERICA, Inc.
305 East 47th Street, New York City

Divisions:
Julien P. Friez and Sons, Inc., Baltimore, Md.
Molded Insulation Co., Mt. Vernon, N. Y.
Aircraft Control Corp., Philadelphia, Pa.

AL BUFFINTON
THE DADDY OF THE OUTBOARDS

By PIERRE LABONTE, JR.

THEY say that Henry Ford is responsible for filling our highways with long lines of automobiles, which, like a string of sausages, wind their way along the countryside. Even though there are scores of motor manufacturers, the creator of the now historic Lizzie and the now pretty daughter in more modish attire, is given the responsibility of making automobiles more common along the highways than Old Dobbin and buggy ever hoped to be.

Now something has happened in the last few years to every lake and stream from Maine to Florida, from the Atlantic to the Pacific, in fact, wherever there is a body of water available. We find these calm or choppy surfaces peopled with flying craft; there is a roar and a splash as the tiny ships bounce and rush along their course and the realization comes that the speed that is now on the highways has been extended to the streams. In the words of the small boy, who, being in a car, held back in a stream of traffic two miles in length, heard his father mention something to the effect that one particular manufacturer had sure "cluttered up the roads with his gas-buggies"—"Who done it?" the boy asked.

Al Buffinton, a pioneer builder of outboard boats

And so, when we see the extraordinary and rapid development of outboard motoring, we are apt to ask ourselves: "Who done it?" We might say that Alton T., more popularly known at Al Buffinton of Fall River, Mass., can be accused of being the cause of much of the turmoil and joyful excitement wherever a bottom can float. It might seem an exaggeration to say that Al Buffinton "done it all," just as it is also a little too much to say that Henry Ford has filled our streets and state roads with speeding cars. Yet Ford created a low price car that led to the production of hundreds of thousands of automobiles within the reach of the most modest pocketbook. Al Buffinton, builder of the Cute Craft and one of the pioneers in making outboard motor boating one of the most popular sports of the day, has also contributed his share—a large one—to bringing this pleasure, not to a few, but to thousands because of the small outlay involved.

Of course Al started something that no power on earth can stop. He would be the last man to assume the honor or opprobrium of causing a worldwide churning of streams. And, while bringing one of the most fascinating new sports within reach of the multitude, he is unconscious of having done something for humanity, nevertheless all who know Al have heard from his lips that his chief interest in outboard motor boating at the start destroyed all his hopes of having a shelf reserved for himself in the Hall of Fame. He went into outboard motor boating because he wanted to beat the other fellow to the fishing grounds. It was disgraceful enough that he found the idea of rowing miles and miles a poor one—that made fishing real work—why row to the fish when one can be pushed towards them, he debated. And so it was way back when outboard motoring was just a trifle faster than rowing that Al had himself pushed to where the most bites could be found. That's as far as Al claims his humanitarianism goes in the matter.

The fact remains, however, that few industries and few sports have developed so rapidly and with such tremendous strides as outboard motor boating. Where but a few years ago—we might say within the last three or four years—a speed of 16 miles an hour was considered phenomenal for the craft, this year, on many courses speeds of as much as 50 miles an hour are within reach. There was a dramatic touch to the launching of the first Cute Craft, and if Al is silent on his contribution to the sport, where the launching of his new craft is concerned he can wax most volubly on what he humorously loves to refer to as his Eliza act.

It was in the late fall of 1926, after much experimenting, that the first neat little craft was entrusted to the ice-laden waters of the Westport River, near Fall River. Al, clad in a coonskin coat, ultra-collegiate in appearance, approximately three layers of red flannel wrapped about him and wearing rubber boots, got aboard while some seventy-five persons, representing the press, the curious and the usual people who have to be shown, looked on. They wondered how the new-fangled (*Continued on page* 196)

18 feet of outboard beauty. Note the long, graceful stream-line design. The two after cockpits each seat one more person than shown . . . WITH COMFORT!

Stern view of the a.c.f. WASON "18" showing her extreme 63" beam.

a.c.f. Wason "18"

A boat that is both SAFE and DRY. See how she rides on even keel through the rough cross current. Shown at the right.

Below is a bow view. Note the broad nose and how she throws her wash from about 'midships . . . the assurance of a DRY boat!

. . . for the man who wants *REAL VALUE!*

The WASON "18"! Created by one of America's leading naval designers and built by one of America's greatest industrial plants . . . FOR THE MAN WHO INSISTS ON VALUE FOR HIS MONEY . . . for the man who wants beauty of design; sound, lasting construction; reasonable speed, luxurious comfort and safety. This outstanding boat is 18 feet overall, has the lines and constructional strength of the finest runabout. Her three cockpits seat 7 persons without cramping. She rides on an even keel at 25 to 30 miles per hour and is the dryest boat we know in her class. Not only a beautiful piece of marine architecture, but the most economical boat you can buy on the basis of years of service. Write for descriptive literature and name of nearest dealer. Address a. c. f. Salon, 217 W. 57th Street, New York: a. c. f. Salon, 500 East Jefferson Avenue, Detroit. or S. C. Kyle, 427 Rialto Bldg., San Francisco.

Built in Springfield, Mass., at the Wason Plant of The J. G. Brill Co.

OUTBOARD NOTES

OUTBOARD MOTORS NOW ARE SPORTSMAN'S FRIEND

From the increased demand for outboard motors, it seems that the water-loving public is becoming educated to the thrill and enjoyment of Evinrude outboard motoring. Wherever a lake or body of water is to be found to lure the pleasure-seeking public away from the crowded, dusty city, the outboard motor is to be found in evidence in great numbers.

The sport of boating and outboard motoring has taken on a new impetus with the advent of these compact power packages, which have created pleasure instead of arduous labor out of boating. The outboard motor has taken all the work out of boating and given to the outdoor enthusiast a new means of healthful recreation.

A motor for every use, from high speed to trolling, is produced by the Evinrude Division. For the office man, who deserts the routine of the week on Saturday noon with fishing tackle and rod stowed away in the back seat of the family car, the Evinrude Folding Sportwin is ideally adapted. For easy carrying and portability, this compact little power package folds midway in the gear housing by means of a strong device, so that it may be very conveniently stowed away in an exceptionally small space in the family car. The motor has been provided with a convenient handle grip, so that when folded and in a carring position, it resembles in nearly every detail a man-sized grip. Weighing but 43 pounds and capable of doing from 3 to 13 miles per hour, the Evinrude Folding Sportwin should be the first choice of the man who wants a really portable motor.

Next in size is the Evinrude Fleetwin. This motor weighs but 58 pounds, develops 6 horsepower, and is capable of a speed of 4 to 25 miles per hour. For the man whose primary desire is not portability, this motor is ideally adapted to every use. This sturdy 6 horsepower will carry the fisherman out to far away bayous, across the strongest currents of the widest lake, or to the favorite spawning grounds.

Letting an Evinrude do the work on a run to the hunting grounds

DISTINCTIVE OUTBOARD CRAFT

Persons interested in the latest developments which have taken place in the construction of fine mahogany outboard hulls should secure a copy of the new catalog put out by the Pate-Parkes Manufacturing Company, Nashville, Tenn. The Pate-Parkes Company is the manufacturer of the outboard boat of distinctive design known as the Step-Sled and a model has been provided for every conceivable condition of outboard service. Racing boats, family boats, cruisers and runabouts in both open and closed types are offered so that the prospective purchaser has a wide range of models to select from. The Step-Sled Pilot is the racing model and its name is mentioned frequently in the reports of race winners. One of its latest achievements is the winning of first place in Class C, second in Class B and third in the free-for-all in the June Galveston races.

WOMAN DRIVER SETS RECORD AT WORCESTER

Mrs. Betty Wallace accomplished the unusual at the Worcester Regatta on Decoration Day. This fair blonde driver had taken part in only one race previous to the Worcester Regatta, but in spite of her inexperience, she sped past a field of experienced racers in first place in Class B, Division 1, five mile event and established a new American record at the same time. Mrs. Wallace's average speed over the five mile course was 33.41 miles per hour.

Mrs. Wallace used a stock Ludington Lightning powered with a Johnson Sea Horse 16 in winning her victory.

The plaudits and congratulations of the racing world have been heaped upon pretty Mrs. Wallace for her nerve and skill in making such a successful entry in the outboard field.

Mrs. Betty Wallace at the wheel of her record-breaking Ludington Lightning

TANNER TO DIRECT OUTBOARD MOTORS CORPORATION SALES

P. A. Tanner, who has been acting in the capacity of general sales manager for the Lockwood division, Outboard Motors Corporation, has just been appointed director of sales of the Outboard Motor Corporation and as such has charge of domestic sales and service for all three divisions—Lockwood, Elto and Evinrude—with headquarters at Milwaukee. W. A. Nelson succeeds Mr. Tanner as the sales executive of the Lockwood division.

A SCHOOL FOR OUTBOARD SERVICE

The Evinrude Division of the Outboard Motors Corporation, appreciating the fact that dealers and distributors of their products in all parts of the country are desirous of becoming familiar with factory methods of repair and maintenance, have established a service school in which a course of study is offered, covering a period of from two to three weeks. The school is maintained without charge by the Evinrude Company and is open to any dealers or repair men who desire to take the course. All that is necessary is that application be made to the factory. Forty students are accommodated in the course at one time.

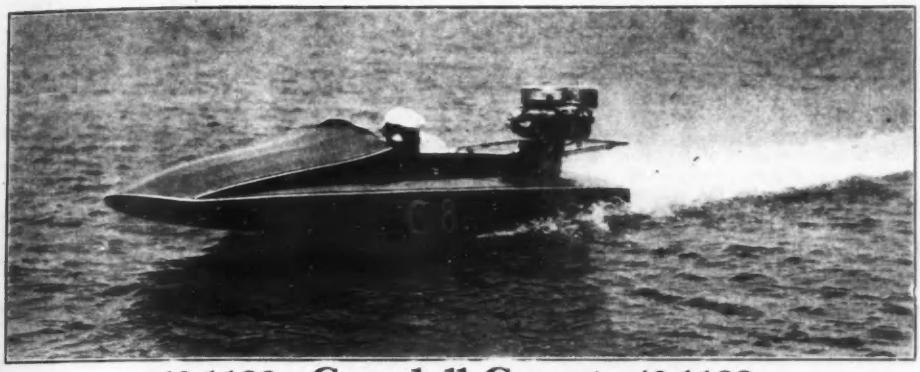
It has been the experience of the Evinrude Division that the average garage man or dealers' repairman knows far too little about the outboard motor to give satisfactory repair service. This, of course, is not the fault of the repairman, but is due chiefly to the fact that most outboard motors are of the two-cycle variety whereas these mechanics are more accustomed to the four-cycle automobile motor.

Factory training of this kind is invaluable to the repairman as well as the dealer whom he represents. He learns not only the detailed mechanical construction of each model Evinrude motor manufactured, but also the method of making repairs which is recognized to be correct by the factory.

(*Continued on page* 180)

John Adams, his Crandall Comet boat and a Sea Horse 16—the trio that set the B and C Class records at 40.11 m.p.h.

40.1199 *CRANDALL COMET* 40.1199 *CRANDALL COMET* 40.1199 *CRANDALL COMET* 40.1199 *CRANDALL COMET*
40.1199 *CRANDALL COMET* 40.1199 *CRANDALL COMET* 40.1199 *CRANDALL COMET* 40.1199 *CRANDALL COMET*



40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET* 40.1199 *CRANDALL* 40.1199 *COMET*

40.1199—Crandall Comet—40.1199

CRANDALL CALENDAR

June 13, 1929: First stock hull of the 1929 model of the "Crandall Comet" completed.

June 15, 1929: Balboa Bay, Cal. "Crandall Comet" set an American record of 40.1199 M.P.H. for class B, in time trials sanctioned by the A. P. B. A.

June 19, 1929: By air mail the check for the first of the "Warren Ripple Awards" (and the only one made to date) was received by John R. Adams for driving the "Crandall Comet" with a Johnson Sea Horse 16 over forty miles an hour.

July 4, 1929: Alamitos Bay, Cal. "Crandall Comet" won all class C events against the famous Blue Streak IV.

July 6 and 7, 1919: Lake Arrowhead, Cal. "Crandall Comet" won first place in class B, making the fastest time of any B or C class boat.

July 10, 1929 (as we write the copy). In the space of three weeks the "Crandall Comet," pictured above, with a Johnson 16 motor and Johnny Adams at the wheel, has set an American record faster than any B or C class speed ever before recorded and has won first places in both B and C class competition.

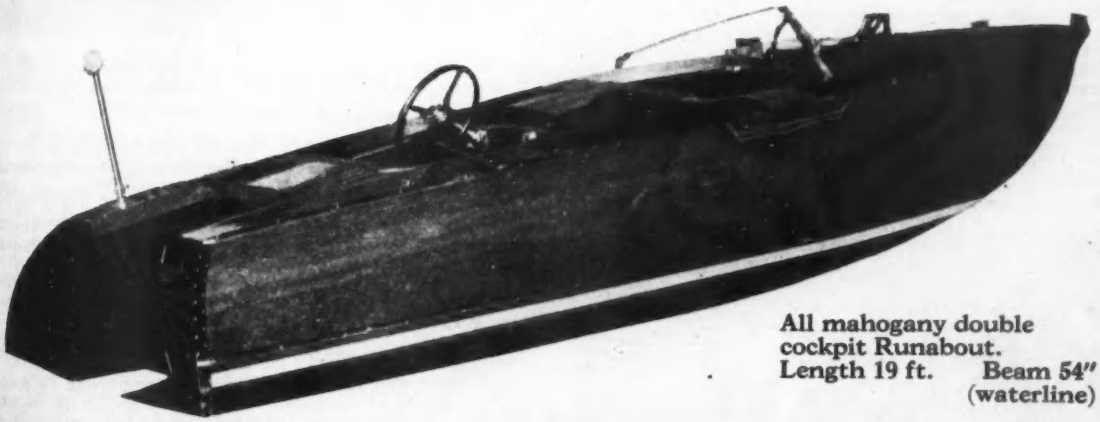
THAT'S PERFORMANCE

CRANDALL BOAT COMPANY

Builders of "CRANDALL CRAFT" *Runabouts*
and "CRANDALL COMET" *Racing Hulls*

Main Plant, General Office and Experimental Laboratory
Newport Beach, California

Eastern Branch
Eagle River
Wisconsin



All mahogany double cockpit Runabout.
Length 19 ft. Beam 54" (waterline)

Standard equipment includes:—Nickel plated cutwater, gunwales, fenders, bow and stern lights, and steering wheel. Ten gallon gasoline tank with Autopulse and equipment. Lifting rings. "V" type wind shield. Upholstered spring cushions, automatic bilge bailer, fire extinguisher. Finished in natural mahogany.

Completely equipped, without motor.....$1045.00
With 4-cylinder outboard motor.....1350.00
Prices F.O.B. at either Newport Beach, Calif. or Eagle River, Wis.

Write for full particulars

OUTBOARD NOTES

(*Continued from page* 178)

DWIGHT LUMBER COMPANY EXPANDS

The Dwight Lumber Company, of Detroit, builders of the famous Dee-Wite outboard powered runabouts, reports an extensive expansion program as a result of unprecedented sales volume.

At the last meeting of the board of directors of the Dwight Lumber Company complete approval was given to an expansion program involving three additional new units of the main plant. Each of the new buildings is to be 810 feet long by 60 feet in width and is to be completely equipped with the best of modern machine tools, conveyors, and so forth for the economical production of Dee-Wite motorboats. These units, added to the present buildings, the new mill, and the new experimental building just completed, will give Dee-Wite one of the largest and most modern plants in the country devoted exclusively to the production of fine all-mahogany runabouts.

The Dee-Wite travels fast with very little disturbance

The layout of these new plants has been designed by a group of the foremost industrial engineers of Detroit—men who have designed and equipped some of the leading motor car and body plants of that industrial city. With these additions, Dee-Wite now has a complete straight-line production system laid out after the most approved automotive practice, with the raw material coming in at one end of the line and the finished boats being taken off at the other. The maximum production of the finished plants will be sixty completely equipped Dee-Wites a day.

OUTBOARDS IN THE ARCTIC

Another chapter has been added to the long history of dependable performances of outboard motors in the Arctic and Antarctic Seas.

Harold McCracken, one of the principals of the Stoll-McCracken Expedition into the upper reaches of the Kolyma River in Northern Siberia, has supplied the new episode.

"The two Johnsons were with us at every stage of the trip," wrote Mr. McCracken on his recent return to New York City. "They were given some darned hard usage and they stood up marvelously. We used the larger one to push our entire outfit across the tundra country of the Bering Sea coast of the Alaskan peninsula into a new big bear country. And believe me, it got some hard knocks, due to the rifles of rocks and sand.

At Diomede Island, the Eskimos have really withstood the onmarch of civilization far more than any other section of the Arctic, due, perhaps, to their almost perfect isolation.

Now the Alaskan Eskimo discards his paddle and lets a powerful Johnson outboard push his walrus-hide oomiak

"They still use the walrus hide oomiaks which they have been using since the year one. These are really flat-bottom boats covered with the tough walrus hide.

"I showed them the big Johnson and they wanted it put on the back of one of these queer-looking craft. They were a little skeptical of it at first, but it worked perfectly. In fact, so perfectly that I had to let them have it. They would line up every oomiak in the village and tow all of them, giving the whole town a constant joy ride around and around our boat, the schooner Morrisey."

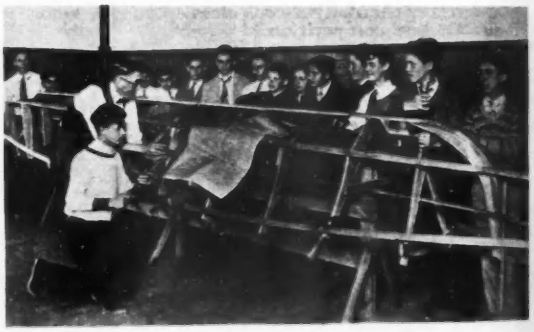
NEW ORLEANS BOYS HAVE BOAT BUILDING CONTEST

To Arthur Duvic's Sons, marine dealers in New Orleans, goes the credit for originating and successfully executing one of the most unique and yet practical selling ideas in the entire history of outboard motor and boat merchandising.

Briefly, their idea was a contest—a boat building contest among the boys in the manual training departments of the New Orleans public schools. Working with Professor J. S. Pearce, manual training instructor, Mr. Duvic enrolled enough boys so that, at the last report, some 26 boats were being built. These were the "Baby Buzz" type craft, built from plans furnished in the Johnson boat manual.

The prizes offered by the Johnson dealer were a Sea Horse 10, first prize; a Sea Horse 3, second prize, and yachting flags, running lights, flag sockets and life preserver pillows for third and fourth prizes.

"You have no idea the interest this created among the boys. They all talked outboard motoring in terms of Johnson Motors and Johnson designed boats," writes Mr. Duvic. "It certainly has planted outboard motors and Arthur Duvic's Sons in the minds of New Orleans boys."



This group of boys is learning the fine points of boat construction under the guidance of a manual training professor in a New Orleans school

DUPLEX WINS PEORIA MARATHON

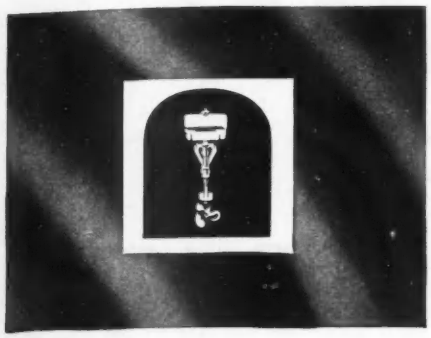
Demonstrating once more its efficiency as a lubricant for high-speed racing motors, Duplex Outboard Special marine engine oil was used by Bill Frey recently when he won the 200-mile Marathon at Peoria. Frey's motor was an Elto and the high efficiency of Duplex lubrication was a big factor contributing to the wonderful performance of the motor. The free-for-all was also won with this combination and J. V. Weaver using a Lockwood motor also lubricated by Duplex Outboard Special won in Class B.

POSITIVE SPEED CONTROL

Consistent with its policy of constantly improving its motors, both in details of mechanical construction and in performance, the Elto Division of the Outboard Motors Corporation is now bringing out a rack and gear segment speed control for use on the big Elto quads. It consists of a sliding rack and a gear segment and makes speed control easier and more positive. The timer swings smoothly through a large arc of about 160 degrees, thus enabling the driver to add or decrease speed very gradually. The arrangement is simple and strong and cannot get out of adjustment. It is easily adapted and operates well with the Elto Remote Control and with Bowden Push Wire control, both of which permit the operator to regulate the speed up forward at the steering wheel.

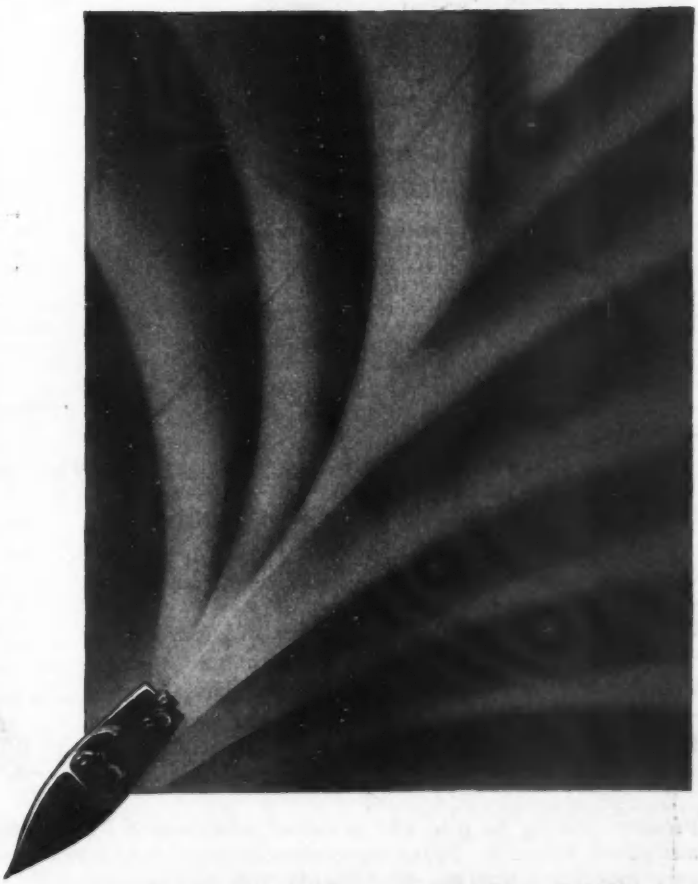
(*Continued on page* 188)

THIS IS THE AGE OF ALUMINUM



WANT A REAL THRILL?

PUT an outboard motor on a rakish hull. Cast off your lines and head her out toward somewhere else. Your pulse will quicken as the first waves slap the bow. Your eyes will sparkle as the wet spray flies. And your heart will leap when you give 'er the gun and she streaks away toward a distant goal. ¶ There's one thing about an outboard motor to which you may never have given a thought. That's aluminum. If it were not for the light weight and great strength of aluminum and its alloys, you might still be deprived of the pleasures an outboard motor affords. ¶ Aluminum alloys, and especially LYNITE 195 heat-treated aluminum casting alloys, made the modern outboard motor possible. They put strength and power and ruggedness into a compact little motor that is light, portable and convenient. They have given you something that spells "sport" every time you touch the throttle. ¶ And LYNITE pistons, forgings and heat-treated castings have done even more. Specified by practically every engineer, and by almost every manufacturer, they give you a yardstick by which to measure the quality of the motor you buy. You need only ask, "Are the vital parts made of LYNITE?"



LYNITE

ALUMINUM

ALUMINUM COMPANY OF AMERICA

PITTSBURGH, PA.

ALUMINUM ALLOY PISTONS, RODS AND HEAT-TREATED CASTINGS

MARATHON WINNERS ARE GOOD BOATS!

WILDCAT WINS!

First place in class "C" 200 mile

PEORIA MARATHON

Karl Koeffler, famous winner of races, put his WILDCAT over the 80 laps of very rough water to finish a glorious first in his class. He even beat all but one of the larger motors, finishing second in the entire field of starters. The Free-For-All winner was but 2 min., 17 sec. ahead of him at the end of the 200 mile hammering. His WILDCAT came through in perfect condition. There were 29 lap prizes in this outboard classic, and Hooton boats won more than half of them—sixteen in all!

SAFETY-PLANE WINS!

First place in class "C" 112 mile

CAPE ANN MARATHON

Frank Wigglesworth, sportsman of Boston, did this clever piece of driving. The race was of 5 laps mostly in the open Atlantic off Gloucester, and there was rough water and fog aplenty. Mr. Wigglesworth won three of the five laps and had no trouble in leaving the other C motors astern. Like Koeffler, he even trimmed the larger motors with one exception, taking a close second, among the entire list of crack drivers. It was a great day for the SAFETY-PLANE!

Here Are the Hooton Marathon Victories

Peoria-St. Louis—1928—1st place, Free-For-All —Elto.
Peoria-St. Louis—1928—1st, 2nd, 3rd, Class B —Lockwood
Kansas City-St. Louis—1928—1st place, Free-For-All, —Johnson
Charleston-Folly Beach—1928—1st place, Class C —Johnson
Lake Charles, La., Marathon—1928—1st place, Class B —Lockwood
Danbury, Conn., Marathon—1928—1st place, Free-For-All—Elto
Belle Isle Marathon—1929—2nd and 3rd places, Class B—Lockwood
Cape Ann Marathon—1929—1st place, Class C —Evinrude
Peoria 200 Mile Race—1929—1st place, Class C —Evinrude

Pleasure boats, to give the greatest satisfaction, must have the qualities which go to make marathon winners. Stamina; seaworthiness; safe control; speed! You have all these in a HOOTON to a matchless degree—plus* beauty *and* comfort *as well. Buy HOOTONS for pleasure, and know the thrill of driving world's championship caliber!

GORDON B. HOOTON,

505 GRANDVILLE AVE.
GRAND RAPIDS, MICH.

Advertising index will be found on 3rd last page

-four- great Hootons

There is ONE to suit your needs!

Famous "MODEL R"—Class B racer

And what a racer! There are 200 of these in use, and they have won a total of 220 races and seven American records. This stout little 10-foot stepper gives you the very limit of speed, with exceptional control, for Class B competition.

The WILDCAT,—all motor racer

For racing with the big motors of today, no faster or safer hull has ever been built. Leading drivers prefer the WILDCAT because it won't "chine in" or swerve; and they know the construction is the strongest to be had. The WILDCAT, unlike most racers, is arranged to seat two additional persons comfortably,—and it carries them at high speed with B motors and larger.

The SAFETY-PLANE,—a pleasure speeder

for all motor sizes. Here is a sturdy and safe hydroplane for fun and utility. Four passenger capacity; speed to 45 miles an hour; mahogany decks; full cushioned seats; brass bound chines. The 13½-ft. SAFETY-PLANE has thrills for the solo driver, safety for the family, and can tow an aquaplane with ease. Can you beat it?

And below, the

Vee-Plane

The family runabout De Luxe

If your craving for speed can be satisfied at between 20 and 36 miles an hour; if you do part of your boating on choppy water, and are tired of the usual bumpy riding of less advanced designs; if you want dry, comfortable, and SAFE accommodations for five persons,—all in one beautiful mahogany boat,—the 15-ft. VEE-PLANE should be your choice. This hull is a distinctly new type, and is taking the boatmen by storm wherever it is seen and demonstrated.

BUY A HOOTON NOW—AND NEXT YEAR YOUR CLUB WILL GO HOOTON!

GORDON B. HOOTON

505 GRANDVILLE AVENUE
GRAND RAPIDS, MICH.

Largest Selection of Boats in New England on Display at

ATLANTIC RADIO & MARINE CO.

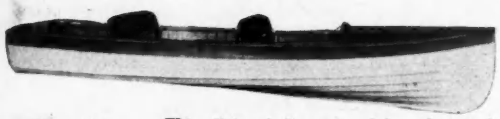
INCORPORATED

20 BROOKLINE AVENUE BOSTON, MASS.

AT our showrooms you have the opportunity of comparing leading makes of outboard boats for racing, commuting, family use, fishing, camping, duck hunting, etc. The boats which we represent were selected on the basis of proven merit in actual service. Therefore you can be assured of genuine satisfaction in owning any of these famous boats.

HOOTON — These famous racing hulls piled up over 200 victories last year and are at it again this year. Hooton won Class B in the 200-mile Gloucester race June 15th.

DEE-WITE — This luxurious family runabout is at home among the fleetest company. Its appearance, performance and reputation have won nation-wide popularity for Dee-Wite in less than a year.



LYMAN — This clinker built outboard is a fast craft suitable for all types of service and gives an excellent account of itself regardless of weather or sea.

HERBST — Model H illustrated is one of three family runabouts built by this famous builder of record breaking racing hulls. At its price it offers unequalled value.

Also

DART and DOWN EASTER RUNABOUTS

CORSAIR CRUISERS

SKIBOARDS LOCKWOOD MOTORS

CHRYSLER and STEARNS MARINE ENGINES

DUPLEX MARINE OIL

KASSON LUBRICATING COMPOUND

UTE GARMENTS

Propeller Repitching

Fast Times Round Manhattan Isle

(*Continued from page* 168)

to see and dodge it in time. The winner, Harold Chapman, had perhaps the strangest experience of all. In driving through the draw of one of the Harlem River bridges, he struck some drift which ripped the tiller out of his hands and set the boat going in such a small and rapid circle that he was thrown out of the boat. The motion sideways threw spray on the engine and stopped it so that when he appeared on the surface after a moment or two, his boat was floating towards him on the tide and he merely had to wait for it and climb aboard again. A slight amount of bailing and wiping restored the outfit to serviceable condition and he was again on his way, overtaking those who had passed him while he was swimming. Another odd experience was that of Victor Withstandley, veteran outboard driver who was sailing serenely around the lower end of New York, well up with the leaders, when he noticed that his boat was making water and found that he had collided with something which had punched a hole in the bottom. The boat filled slowly and presently sank

Earle Barber, recently appointed Vice-President in charge of sales of the Johnson Motor Company

from underneath him and left him floating on the surface. As often happens, he was not observed by the patrol boats in the vicinity and were it not for the friendly aid of some boys in a canoe, his boat and engine would have been lost. They were only able to drag the boat to a pier where they secured it, leaving poor Victor swimming about among the ferry boats. He did not stick out of the water far enough for them to see him and reckons he must have been in the water a full half hour. About this time another contestant broke a shear pin close aboard and Victor paddled over and nearly scared this poor driver to death by his sudden appearance from nowhere. There was nothing else to do but take him aboard and after the pin was repaired, the boat with a double load continued and after a mile or two calmly turned over and gave Victor and his companion another swim. This time the patrol boat picked them out and returned them to shore. Many similar experiences could be recited by the contestants if they could all be collected and recorded. The few instances cited are sufficient to give an insight into the difficulties of this course. The cheerful way in which all the drivers accepted misfortune shows the good sportsmanship which prevails and their only hope is that fortune will smile more graciously on them the next time they try this course.

An analysis of the finish times shows very plainly that speed alone is of no great value in a contest of this nature. The winner, powered with a Johnson, Class D engine was handicapped slightly as mentioned and was only able to beat the second boat,

(*Continued on page* 186)

It's not too late to own a LACONIA SPORTSTER

FORESEEING the tremendous demand for Laconia SportSters we stepped-up the production of these famous boats during the spring, stocking a sufficient reserve to accommodate mid-summer deliveries. Although this reserve stock is rapidly being depleted we can insure prompt delivery on orders placed now.

At its price no other outboard boat equals the double cockpit Laconia SportSter in dollar-for-dollar value. In this beautiful water craft you have sixteen feet of master boat construction, embodying only the finest materials and a ruggedness that defies rough usuage and long service. In finish, equipment, comfort and easy riding the Laconia SportSter is comparable with inboard runabouts selling at many times its price.

Upholstered seats, auto type control, glass windshield, electric running lights, white nickel brass deck hardware, fenders and full equipment required by law, including whistle, fire extinguisher, pilot rules, etc., are standard at no increase in cost. And, all at the low price of $369.00. Speeds up to 35 M.P.H. are attainable, depending on the size of motor used.

Write today for descriptive literature and name of Laconia dealer nearest to you.

$369.00

f. o. b. Laconia, N. H.

Ask About the Laconia Deferred Payment Plan

LACONIA CAR COMPANY

LACONIA, NEW HAMPSHIRE

Dealers! Get Our Proposition Today

CUTE-CRAFT

Constantly Leading

THE notable accomplishments of Cute-Craft at the last Albany Regatta provide better than ever the proof of their superior performing qualities. ¶ This event witnessed a *stock* Sea Horse Runabout (as pictured above) winning the Grand Free-for-All; and considering that the victory was won over a field of strictly racing outfits, the achievement unquestionably has no parallel in the history of outboard competition. The same regatta also witnessed the Cute-Craft Bi-plane taking an easy first in Class A, as well as the raising of an existing Class B record by the Cute-Craft Meteor. ¶ With such facts to offer evidence, it can readily be seen that the claims made for Cute-Craft are not based on idle speculation, and they serve to show that Cute-Craft leads — and leads constantly.

Become better acquainted with the superperforming Cute-Craft models by writing for descriptive literature today.

CUTE CRAFT INCORPORATED
FALL RIVER, MASS.

Popularized by Their Performance

Fast Times Round Manhatan Isle

(*Continued from page* 184)

driven by a 15 year old high school boy by a mere 15 seconds. Walter Petersen had constructed his Bossert Pirate Kid from knockdown parts supplied by the manufacturer and came within a few seconds of being the winner. He got tangled up among some ferry boats in the lower river and was delayed just enough to cost him the first place. The fifth boat to finish was Miss Julie driven by Kirk Ames with a Lockwood engine and his time for the full course was only four minutes and forty-two seconds longer than the winner.

The award of prizes was made immediately after the boats had all finished and Harold Chapman was awarded the trophy as well as $500.00 in cash for winning the first place in the entire race as well as a separate prize of $125.00 for being first in Class D. The winners in class B and C weer also awarded a prize of $125.00 with the second and third place winners in each class also receiving a substantial award.

This race aroused much popular enthusiasm on the part of the general public in contests of this kind and countless thousands of spectators were enabled to observe the progress of the race around the island. The waterfront parks and docks were black with people and those at Battery Park got plenty of thrills as the little boats jumped from wave to wave in getting around this dangerous point. The order of finish in the several classes is as follows:

CLASS B

Miss Julie, Kirk Ames, Ramsey Hull, Lockwood engine	1:02.42
Hell Diver, Victor E. Temple, Hooten hull, Caille engine	1:04.40
Miss Julie III, Fred Jacoby, Jacoby hull, Johnson engine	1:06.10
Flying Fish VI, T. Roberts, Airship hull, Johnson engine	1:09.20
Baby Ben, Chester, Conn., Hallet hull, Lockwood engine	1:11.05
Miss Russell, A. Pringle, Russell hull, Johnson engine	1:38.35
N-313, H. J. Tanner, Martin hull, Elto engine	1:52.05

CLASS C

Kid II, Walter Petersen, Bossert hull, Evinrude engine	58.15
Baby Spook, Harry C. White, Haviland & White hull, Evinrude engine	59.30
Lightning, William Feldhusen, Boyd Martin hull, Caille engine	1:00.10
Shark Hydro, Frank Johnson, Jr., Cakes hull, Evinrude engine	1:03.40
Safty Craft, Alfred S. Long, Helm Hull, Evinrude engine	1:04.35
Bossert, W. E. Crawford, Bossert hull, Evinrude engine	1:06.20
N-32, F. Schineller, Bossert hull, Evinrude engine	1:09.55
N-378, F. Linden, Sea Sled hull, Evinrude engine	1:12.33
J-29, E. Jantsen, Jabery hull, Evinrude engine	1:19.00
Florida Friend, A. S. Titcomb, Bossert hull, Evinrude engine	1:20.45

CLASS D

Big Ben, Harold Chapman, Hallock hull, Johnson engine	58.00
Baby Whale, Frank W. Meyers, Kelley hull, Johnson engine	1:05.00
Gee Golly, H. A. Cunningham, Airship hull, Johnson engine	1:06.50
Fairchild, James C. Smith, Fairchild hull, Johnson engine	1:09.15
Penn aYn, A. J. Despres, Pen aYn hull, Johnson	1:15.00
N-392, F. J. Mazane, Sea Sled hull, Johnson engine	1:23.55
N-183, S. F. Breese, Ski Boat hull, Johnson engine	2:06.35
Nemo III, Jack Brockley, Class E, Kidney hull, Elto engine	1:12.25

Pepping Up the Outboard

(*Continued from page* 167)

plugs in series. Be that as it may, it is a positive tact that spark plugs in series assure perfect synchronization, which is an important factor in the proper functioning of a twin cylinder outboard motor.

By applying the foregoing methods, the owner of an outboard motor several years old can bring it nearly up to date so far as performance is concerned. So rapid has been the advance in outboard motor design and construction that this year's motor will be an old-timer when the forthcoming season's model are announced.

LONG DISTANCE OUTBOARDING IN THE NORTHWEST

A successful attempt was made recently by Raymond L. Haines of Juneau, Alaska, to negotiate the distance between his home port and Seattle, Washington, by outboard—a run which took him down the coast over a course of approximately 950 nautical miles.

Haines' boat, Miss Juneau, was a stock 15-foot open Vee Plane built by the Hooten Boat Company, and his motor, a stock Class C Evinrude, gave him an average speed for the run of about 20 m. p. h. Haines is a member of the Juneau Yacht Club of Juneau, Alaska.

Advertisnng index will be found on 3rd last page

Listen to LOCKWOOD OWNERS

A surprisingly large percent of Lockwood Motors go to men who have had previous experience with other outboards. They have learned what to look for in a Boat Motor, and in Lockwood, they have found what they want.

One will tell you: "I like the extra power, pep and speed that little devil shows. I can walk away from any other Motor of its class and weight."

Another will say: "I prefer Lockwood Magneto Ignition. It starts the Motor so easily."

Still another will tell you: "I wouldn't have a Motor without 'The Lockwood Pilot.' Not only because it's a great safety protection for all my family, but because the steering handle stays where I leave it and the boat goes where I want it to while I light my pipe or arrange my tackle."

Then a fourth will pipe up: "Lockwood has a real silenced exhaust. Instead of robbing my Motor of power, it actually gives it extra pep and extra speed in the water."

If there's an engineer or a mechanic in the bunch who knows the innards of a Motor, he'll tell you:

"It's the sweetest engineering job I've ever seen in Outboards — and man, how she does stand up in service — and that new Lockwood scheme of oiling the crank pin bearings as well as the main bearings shows how far Lockwood goes to protect a fellow's pocket book."

So, whether you want a light, fast family Motor like the Lockwood Ace, or the fast, powerful but portable general purpose Motor like the Lockwood Silent Chief, or a flashing racing Motor that will clean up on the bunch and put the silver cups on your mantle, listen to Lockwood owners — you'll be pretty sure to choose a —

LOCKWOOD OUTBOARD MOTOR

Three Great Motors Built by Lockwood

The "Ace"

A 50 lb. Outboard, developing about 7 H. P. and holder of every 1928 and 1929 Official American Speed Record for Motors of its class.

The "Silent Chief"

Most popular Lockwood ever built. A Class B Motor with all the power that can be put into a Motor, and still have it conveniently portable.

The "Racing Chief"

A Motor that is all that the name implies, equipped with two carburetors and fresh oil lubrication.

Convenient Purchase Terms

are now offered by most Lockwood Dealers to those who wish to pay for a Lockwood Motor out of income instead of capital.

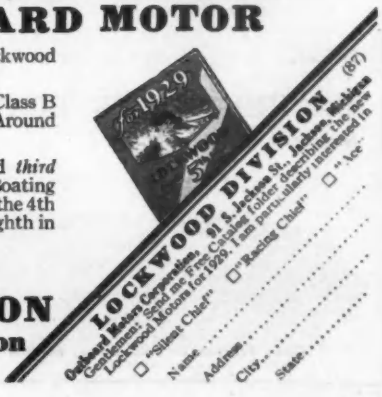
Here are the latest proofs of Lockwood Speed and Endurance:

Lockwood Racing CHIEF won *first place* in Class B and *fifth* in the entire field of 53 entries in the "Around Manhattan Island Race" on the 30th of June.

Lockwood Racing CHIEF also won *first* and *third* places in Class B in the Mississippi Valley Power Boating Association 200 mile Marathon which was run on the 4th of July. The first Racing CHIEF to finish was eighth in the entire list of participants.

Write for New Lockwood Catalog.

LOCKWOOD DIVISION
Outboard Motors Corporation
91 S. Jackson St., Jackson, Mich.


for 1929
LOCKWOOD DIVISION (87)
Outboard Motors Corporation, 91 S. Jackson St., Jackson, Michigan
Gentlemen: Send me Free Catalog folder describing the new Lockwood Motors for 1929. I am particularly interested in
☐ "Silent Chief" ☐ "Racing Chief" ☐ "Ace"
Name .....
Address .....
City ..... State .....

Thrilling—Fast —Staunch and Absolutely Safe

WaterWitch

"Sweeps the Water"

The New Water Witch Runabout

The Smartest Mahogany Outboard for its Size Speed and Design

THE sixteen foot, five passenger Water Witch runabout has many advantages given by no other outboard boat. For instance the two forward seats are built with convertible backs which may be turned over or dropped down to form sleeping accommodations at night. The driver's seat is of the swivel and sliding type, permitting right or left hand driving. For camping, fishing, duck hunting, picnicking or touring you could not want a more suitable boat. It is designed to perform at maximum efficiency with any make motor, making it ideal for commuting and racing. The Water Witch is luxuriously fitted with Zapon Spanish leather upholstery, nickel fender streaks and deck hardware.

Immediate Deliveries

Write today for further particulars and name of dealer nearest you.

$373

Complete Except for Motor

Dealers! Write or wire for our attractive proposition.

DACHEL-CARTER BOAT CO., Inc.

BENTON HARBOR MICHIGAN

Seats reverse or fold down, making bed for two.

OUTBOARD NOTES

(*Continued from page* 180)

THE CARE OF THE OUTBOARD

Realizing the necessity of acquainting purchasers of outboard speed boats who have had no previous experience with this type of craft, with some of the essentials relating to their care and operation, the Ludington Aircraft Company of Philadelphia has prepared an instruction card for the handling of their two models, the Flash and Lighting.

Detailed information is given covering the proper procedure right from the time it is first taken from the crate. Then the best method of attaching the motor to the hull is discussed, as well as the correct manner of getting the boat under way and handling it at speed. Finally, a number of useful pointers are given covering the care of the hull.

Owners of Ludington boats will undoubtedly find that this card is just the thing they need to secure best performance and satisfaction from their outboard craft.

Odis Porter and T. E. Myers of Indianapolis, Official Timers of the American Power Boat Association, who will time the Gold Cup Boats at Red Bank this year on August 24 and 25

RECENT CAPE COD SHIPMENTS

The Cape Cod Shipbuilding Corporation of Boston and Wareham, Mass., who have been shipping boats by the carload since May 1, report a continuous rush of business which has never been equalled in their history. The Cape Cod line, which includes practically all types of boats from the small yacht tender to the ever popular Baby Knockabouts, and also the exceptionally varied types of outboard motor boats, make it possible for anyone looking for a small boat, whether it be sail, motor or rowing type, to fulfill his requirements. They are sold at reasonable prices and at the same time are exceptionally seaworthy, regardless of type. Interesting new catalogs covering the complete Cape Cod line will be mailed without charge on application to the Cape Cod Shipbuilding Corporation, 18 Tremont St, Boston, Mass.

NEW EVINRUDE YEARBOOK

The new 1929 Evinrude year book has put in its appearance, and is a beautifully illustrated 32-page catalogue illustrating the latest models of Evinrude motors. In addition, it gives full details of the races held during the previous year in which Evinrude motors were victorious. The new year book is full of interesting illustrations of last year's racing scenes and contains many pages devoted to details of last year's regattas. Much valuable information for the outboard enthusiast is also included such as a guide to show the types of outboard motors which are best adapted to the various kinds of outboard hulls that are being produced today. Copies of the new year book may be secured by writing to the Evinrude Division, Outboard Motors Corporation, Milwaukee, Wisconsin.

SEA HORSE CROSSES ONTARIO

Another vivid story of the stamina and dependability of outboard motors is revealed in the account of the trip of Harold Ballard and two others in a trip from Toronto to Niagara-on-the-Lake, across Lake Ontario, recently.

The trip was made in one hour and 40 minutes, the boat being out of sight of land fofr about twenty minutes. Approaching the southern shore they ran into a heavy sea, and Ballard was tossed clear out of the boat. He fortunately fell back in and the hull remained intact.

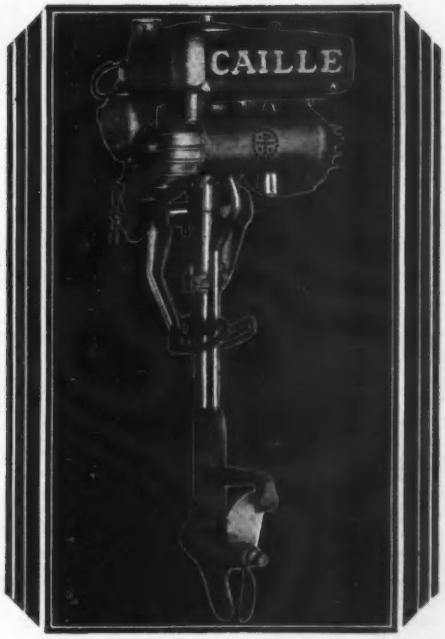
Mr. Ballard states that during the entire trip his Sea Horse 16 performed perfectly.

(*Continued on page* 190)

Advertising index will be found on 3rd last page

FOLKS—you've been waiting for it

so here it is!



HERE'S a new outboard motor you can easily take on your vacation—a motor that well deserves its name—the COMPANION. The compactness and detachable features are both innovations in outboard motors today. Think of it, the whole motor complete, including ignition, weighs less than 40 lbs.! And the compactness of this motor has not sacrificed its power. In fact, it has far more power than has ever before been built into a motor of its size. It has numerous other features, too, which you will instantly appreciate when a CAILLE dealer explains them to you in detail. We do not believe that any outboard motor that has ever been offered to the public has won such immediate success as is certain to be accorded the COMPANION. Although this is the first announcement of this motor, the news of it has already leaked out, and we're getting a deluge of orders from all over the country. By all means, see the CAILLE COMPANION before you buy.

CAILLE MOTOR COMPANY, 6217 Second Blvd., Detroit, Mich.
Distributors and Dealers throughout the United States
Canadian Distributors: Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Export Department: 116 Broad Street, New York City

Easy to transport—can be readily carried anywhere you go.

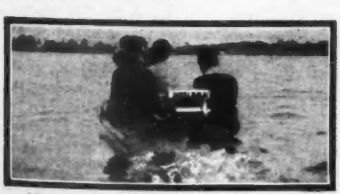
THE NEW CAILLE COMPANION

Takes Apart Like a SHOT GUN

Compactness with extra power, and new detachable feature.

Easy to attach to any kind of boat—anyone can do it.

Easy to start, a twirl of the wheel works like magic.



Powerful enough to give the whole family a real good time.

And—for the fisherman, too, there's no better motor.

Quiet enough so you can easily carry on a conversation.

FAIRCHILD BOATS

"Speed with Safety"

FIRST PRIZE

July 4th, 1929

THE AERO

***On July 4th, at Trenton, N. J., J. Phillips Dykes, driving an Aero, won first place in class "D" and then captured first place in the Grand Free-for-All with the same outfit!**
At Flushing, L. I., Joe Cunar, driving a "B" class Aero, Johnson powered, won first in class "C" and surprised several thousand race "bugs" by winning second place in the Free-For-All against a field carrying motors of twice this power!
At Albany, N. Y., Jim Smith, driving his Aero with a new stock Johnson just out of the crate, won second place in the Free-For-All against the pick of the country's drivers!"

Clear Proof of Aero Superiority!

Special Offer to Drivers!

This world-famous little hydroplane has proven again and again its unqualified ability to stay out ahead of the best company! Here is YOUR OPPORTUNITY TO DRIVE AN AERO NOW!!

By special agreement with our sales organization, we will turn over to the first 25 drivers who answer this advertisement one of our prize-winning Aero Racers for

$149.50

F.O.B. Factory

Regularly $333 all over the world

There are no strings to this offer!

**Fastest time for the regatta. 39.91 m.p.h. for 10 miles in a 35-mile southwest wind*

YOU CAN

Drive a Winner!"

Get that G-r-a-n-d and G-l-o-r-i-o-u-s feeling! The supreme thrill that satisfies! When you strut down the main street with a beautiful loving cup under your arm, and *the championship under your belt! Don't miss owning an Aero now!*

FAIRCHILD BOATS, INC.
41 WEST 43rd STREET, NEW YORK CITY

BELL

OUTBOARD NOTES

(*Continued from page* 188)

KILDEER ISLAND REGATTA

Considerable excitement was provided the spectators of the Second Annual Regatta of the Kildeer Island Boat and Canoe Club at Webster Lake, Mass., on the 4th of July when a stiff breeze whipped the surface of the lake into heavy waves, which provided a serious obstacle for the drivers of the light and fast traveling craft. In fact, the water was so rough that all the skill of the experienced drivers was called upon in order for them to stay inside their boats, much less keep their speedsters on the surface of the water.

Warren G. Harris of Millbury, one of the most widely known racing drivers of the state, had a narrow escape from death when his boat capsized and he was drawn under the stern by suction, where he was imprisoned for about two minutes. Joe Reglinski of Webster captured two first places in the events, winning both the Class C and the Class C free-for-all. The Class B free-for-all was taken by Charles Padula of Worcester and the Class B special by Warren Harris of Millbury. The grand free-for-all had to be postponed until late in the day on account of the choppy condition of the surface of the lake and was won by J. W. Lecuyer of Worcester, who led all the way, with Bert Harris coming in second .

Commander MacDonald, Commodore of the National Outboard Association

CUDDY TO DIRECT N.O.A. PUBLICITY

The National Outboard Association announces the appointment of William (Bill) T. Cuddy as Publicity Director for the association. He has offices at association headquarters, 333 North Michigan Avenue, Chicago.

As a reporter and feature writer Mr. Cuddy has had many years' experience on such representative dailies as The New Orleans States, New Orleans Item, St. Louis Times and The Milwaukee Journal. He is particularly well-known throughout the Midwest for his humorous writings on topics of outdoor life while a staff member of The Milwaukee Journal.

For the past five years Mr. Cuddy has been active in the publicity field, handling industrial and theatrical campaigns of suc hprominence as the Fordson Tractor Division of Ford Motors and as publicity representative in the Midwest for the film celebrities of United Artists Corporation. For two years he was advertising manager of the Saxe circuit of 41 theaters in Wisconsin. He comes to N. O. A. from the Dartnell Corporation of Chicago, with whom he has been associated as editorial representative, writing for the various Dartnell publications on sales promotion, publicity and advertising problems.

Since its organization the National Outboard Association has recognized the need for a centralized publicity bureau specializing in the dissemination of outboard news, correct racing results and other such publicity material that will promote and further a nation-wide interest in small boat motoring. Mr. Cuddy will devote his entire time to work of the National Organization. He will also assist the several affiliated clubs in arranging a publicity campaign for the promotion of their regatta activities.

Advertising index will be found on 3rd last page

Biggest Value in MOTORBOATS!

Special Demonstrations all This Month!

Dee-Wite dealers everywhere are conducting special demonstrations to prove the extraordinary value and performance offered in Dee-Wite all-mahogany motorboats. Hundreds have already purchased Dee-Wites. Call your nearest Dee-Wite dealer today and ask for YOUR ride.

Dee-Wite offers for the first time in the low priced field a really fine all-mahogany motorboat that you may take to any regatta or yacht club landing without fear of comparison. Dee-Wite has that trimness and smoothness of hull design hitherto found only in the most expensive examples of the boat builders' art. A Dee-Wite is big, roomy and comfortable without being expensive to maintain and operate.

Dee-Wite comes to you completely equipped ready for the motor. It has a sloping two-piece windshield, large automobile type steering wheel, upholstered seats, electric running lights, ignition switch on dash and smartly designed hardware, heavily nickelled to withstand corrosion.

Dee-Wite is manufactured by one of the oldest and largest firms of its kind in the country with tremendous resources in capital, skilled labor, manufacturing facilities and purchasing power. It is made in accordance with modern straight-line production methods as employed in the automobile industry.

Your Dee-Wite dealer will explain to you how a Dee-Wite may be bought on a convenient deferred payment plan. He will explain why in a comparatively short time Dee-Wite has become the outstanding boat in its class—truly a sensation in the boating industry. See your dealer today. If you do not know his name write us direct.

DWIGHT LUMBER COMPANY

Boat Division, Dept 58 River Rouge, Michigan

Dee Wite

ALL-MAHOGANY PLEASURE CRAFT

CENTURY BUILDS THE MOST COMPLETE LINE OF HIGH QUALITY OUTBOARD FAMILY BOATS — RUNABOUTS and RACING CRAFT IN THE COUNTRY. Immediate delivery on all models. Write for catalogue and full details.

CENTURY BOAT COMPANY

MANISTEE MICHIGAN

"Buy the Happiness of a Century"

PEORIA OPENS FIRST PERMANENT WATER TRACK

(*Continued from page* 174)

marathon attracted about fifty starters. Classes for B, C, D and unlimited motors were scheduled. A somewhat larger entry list was expected, but many drivers realized that 80 times around a 2½-mile course was no mere afternoon jaunt, so only the most experienced and hardened drivers entered. Counter attractions, as already mentioned, tended to keep some drivers away, so taken altogether, the committee should not be discouraged. What the field lacked in numbers it made up in quality, and they gave the crowds of spectators a real treat for their money, giving them thrill after thrill.

The casualties in the race were quite numerous, but the majority of these were hull failures rather than motor breakdowns. Of the 50-odd starters only 11 finished within the nine-hour limit. The winner, William Frey of Madison, Wisconsin, driving an Elto quad, made the course in 6 hours, 12 minutes, 32 seconds, which is in miles per hour an equivalent to 32.2, a most creditable performance.

A study of the record on pages below will show that a great number of the failures came early in the race. This is due partly to the fact that the water was much rougher early in the morning than later in the day. Most of the boats and motors that lived for the first 100 miles went through to the finish.

There was too much tendency to race light racing hydroplane hulls, the kind that win one-mile dashes but which as a rule do not finish in the longer events. Such hulls are not only weak themselves, but put an added burden on the motors. No power plant can be expected to give 100 percent performance in a rickety, unstable hull and with a driver who is afraid that any moment may be his last.

Second place in the Free-For-All class was taken by R. Preganzer of Antioch, Illinois. Mr. Preganzer also used an Elto motor and drove a Boyd-Martin hull.

In Class D, the winner was Jack Bersonette of Ravinia, Illinois, driving a Boyd-Martin hull with a Johnson Class D motor. Mr. Bersonette's time for the 200 miles was 6 hours, 37 minutes, 29 seconds. F. S. Royer of Chicago, with a Johnson motor, finished second in Class D.

In Class C, Carl Koeffler of Milwaukee, driving an Evinrude powered Hooton boat, finished in first position in 6 hours, 14 minutes, 48 seconds. Templeton Smith of Chicago finished second, L. E. Finn of Peoria third and G. H. Johnson of Racine, Wisconsin, was fourth in Class C. All of these boats were powered with Evinrude motors.

In Class B, Joe Weaver of Rockford, Illinois, driving a Lockwood powered Boyd-Martin boat, won first position in 7 hours, 45 minutes, 47 seconds.

A complete summary of the races will be found below.

Summary 200 Mile Marathon, Peoria, July 4, 1929

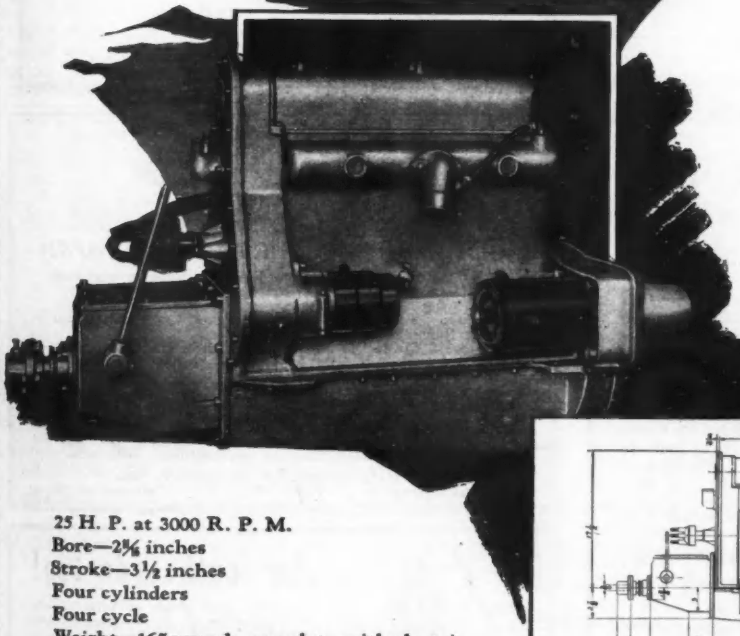
Twenty-second Annual National Regatta M.V.P.B. Association

Pl.	Class	Owner-Address	Engine	Hull	Time
1	FFA	Wm. Frey, Madison, Wis.	Elto	Century	6:12:32
2	C	Carl Koeffler, Milwaukee, Wis.	Evinrude	Hooton	6:14:48
3	C	Jack Bersonnette, Ravinia, Ill.	Johnson	Boyd-M	6:37:29
4	FFA	Ray Preganzer, Antioch, Ill.	Elto	Boyd-M	7:12:25
5	C	Templeton Smith, Chicago, Ill.	Evinrude	Home	7:14:04
6	C	L. E. Finn, Peoria, Ill.	Evinrude	St. L.-Mer.	7:39:25
7	B	F. S. Royer, Chicago, Ill.	Johnson	Home	7:42:50
8	B	J. O. Weaver, Rockford, Ill.	Lockwood	Boyd-M	7:45:47
9	B	H. G. Colby, Waukegan, Ill.	Johnson	Century	7:49:16
10	C	G. H. Johnson, Racine, Wis.	Evinrude	Isle LaPlume	7:53:12
11	B	Karl Long, Jackson, Mich.	Lockwood	Lyman	8:08:23
12	D	Fred Eggebrecht, Elgin, Ill.	Elto	Home	Out 75th Lap
13	D	W. F. Voss, Peoria, Ill.	Johnson	Thompson	Out 72nd Lap
14	D	Wm. Higgins, Racine, Wis.	Elto	Hooton	Out 70th Lap
15	C	Gus Portman, Peoria, Ill.	Evinrude	St. L.-Mer.	Out 64th Lap

(*Continued on page* 194)

Advertising index will be found on 3rd last page

You can make a real RUNABOUT of your outboard with a VAN BLERCK JUNIOR



Ideal power for fast yacht tenders.

The basis for an economical new racing class.

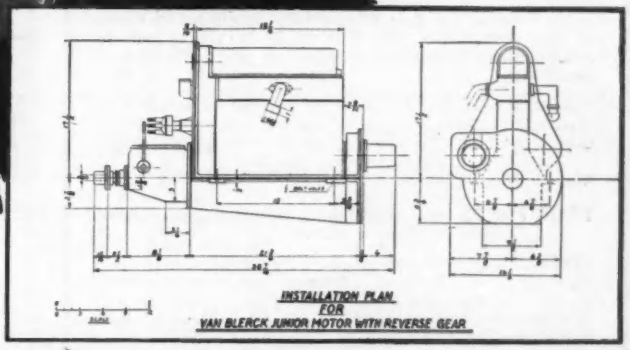
A perfect twin screw installation for small cruisers.

ADAPTABILITY—suitable for any light boat over 12 ft. in length and can be installed in any location from stem to stern so that best results can be obtained as to proper distribution of weight and arrangement of seats.

ECONOMICAL—uses only 2 gallons of gasoline per hour wide open. Oil consumption is so small as to be negligible.

LIGHT WEIGHT—motor weighs only 165 pounds complete with electric starter, generator and reverse gear.

25 H. P. at 3000 R. P. M.
Bore—2⅝ inches
Stroke—3½ inches
Four cylinders
Four cycle
Weight—165 pounds, complete with electric starter, generator and reverse gear.



INSTALLATION PLAN FOR VAN BLERCK JUNIOR MOTOR WITH REVERSE GEAR

Write for new catalog and name of nearest dealer

VAN BLERCK MOTORS, Inc.

BUILDERS of VAN BLERCK and CONTINENTAL-VAN BLERCK MARINE MOTORS

RED BANK, N. J.

PEORIA OPENS FIRST PERMANENT WATER TRACK

(*Continued from page 192*)

16	C	Ralph Harrington, Chicago, Ill.	Evinrude	Century	Out 47th Lap
17	B	L. E. Forbes, Peoria, Ill.	Lockwood	Home	Out 44 th Lap
18	C	C. L. Spencer, St. Louis, Mo.	Evinrude	Pigeon	Out 39th Lap
19	FFA	Eskel, Carlson, Galesburg, Ill.	Elto	Home	Out 37th Lap
20	B	C. C. Anderson, Peoria, Ill.	Lockwood	Century	Out 35th Lap
21	FFA	Eldon Travis, Peoria, Ill.	Elto	Hooton	Out 34th Lap
22	C	Carl Kramer, Chicago, Ill.	Evinrude	Kramer	Out 29th Lap
23	FFA	Ben Coler, Gary, Ind.	Johnson	Hicks	Out 21st Lap
24	FFA	Glenn Travis, Peoria, Ill.	Elto	Hooton	Out 19th Lap
25	FFA	Harold Bock, Chicago, Ill.	Elto	Century	Out 16th Lap
26	D	Rollon Travis, Peoria, Ill.	Elto	Mullins	Out 15th Lap
27	FFA	F. E. Ludolph, Chicago, Ill.	Elto	Ludolph	Out 14th Lap
28	B	B. Ray Derges, Peoria, Ill.	Lockwood	St. L.-Mer.	Out 12th Lap
29	C	Ben Ehrlich, Chicago, Ill.	Johnson	Simmons	Out 12th Lap
30	B	Eugene Maushard, Peoria, Ill.	Elto	Maushard	Out 10th Lap
31	C	J. W. Boesch, Peoria, Ill.	Evinrude	Century	Out 9th Lap
32	C	Gus Portman, Peoria, Ill.	Evinrude	Lyman	Out 9th Lap
33	D	W. M. Waugh, Peoria, Ill.	Johnson	V. and D.	Out 9th Lap
34	FFA	C. F. Scott, Chicago, Ill.	Elto	Ludolph	Out 9th Lap
35	B	W. T. Berwick, Peoria, Ill.	Elto	Century	Out 8th Lap
36	B	W. J. Pebstaman, Chicago, Ill.	Johnson	Hooton	Out 7th Lap
37	FFA	E. J. Lillie, Chicago, Ill.	Elto	Boyd-M	Out 7th Lap
38	C	P. J. DeSplinter, Peoria, Ill.	Evinrude	Desplinter	Out 6th Lap
39	C	Ray Rawson, Milwaukee, Wis.	Evinrude	Rawson	Out 6th Lap
40	C	Harlan Saurs, Milwaukee, Wis.	Evinrude	Saurs	Out 6th Lap
41	FFA	J. E. Lino, Chicago, Ill.	Elto	Century	Out 6th Lap
42	FFA	F. E. Hursh, Havana, Ill.	Elto	Hursh	Out 6th Lap
43	FFA	Warren Durban, Milwaukee, Wis.	Elto	Hooton	Out 5th Lap
44	FFA	I. E. Fromm, Peoria, Ill.	Elto	Fromm	Out 4th Lap
45	B	D. B. Hofstetter, Peoria, Ill.	Elto	White	Out 2nd Lap
46	C	Jas. F. Brady, Peoria, Ill.	Evinrude	Brady	Out 2nd Lap
47	C	R. Barrick, Peoria, Ill.	Caille	Boyd-M	Out 1st Lap
48	B	H. B. Joy, Jr., G. Pointe, Mich.	Johnson	Century	Out 1st Lap
49	B	W. F. Voss, Peoria, Ill.	Johnson	Boyd-M	Out 1st Lap
50	FFA	Malcolm Ernst, Chicago, Ill.	Cross	Simmons	Out 1st Lap
51	FFA	S. J. Leone, Chicago, Ill.	Elto	Leone	Out 1st Lap
52	D	Seull Bishop, Mapleton, Ill.	Johnson	Boyd-M	Out 1st Lap
53	D	F. M. Norman, Galenta, Ill.	Johnson	Aero	Out 1st Lap
54	FFA	C. H. Randall, Beardstown, Ill.	Elto	Hooton	Out 1st Lap
55	C	P A. Osten, Milwaukee, Wis.	Evinrude	Hooton	Out 1st Lap

47.29 M.P.H.

Speed Supreme

Three New American Records

"BLUE STREAK IV"—Fastest Outboard hull in the world, recently proclaimed winner of the "Rudder" trophy for attaining supreme speed during 1928, set three new American Records at Balboa, Calif., June 15, in Official A.P.B.A. Mile Trials, attaining in Class D, the astounding speed of 47.29 M.P.H., which is nearly three miles faster than the previous highest mark.

Class D, Div. II, Blue Streak IV set the mark at 47.29 M.P.H.
Class C, Div. I, Blue Streak IV set the mark at 39.56 M.P.H.
Class C, Div. II, Blue Streak IV set the mark at 39.21 M.P.H.
And at Elsinore, May 30th
Class B, Div. II, 6-miles in competition 37.69 M.P.H.

These FACTS are potent and more eloquent than mere words.

These World Championship Hydroplanes, after design by Ansil Holt of Elsinore, are now available at the popular price of $225.00 for C and D and $175.00 for B class boats, f.o.b., Elsinore. Freight rates East less than $20.00

LAKE ELSINORE BOAT WORKS
ELSINORE, CALIFORNIA

Order by wire for quick delivery, because Business is Good.

GET YOUR BOSSERT PIRATE NOW!

WARM weather is here—boating season is beginning to get under way—stay away from the dust and din and don'ts of the traffic jammed auto highways—get your Bossert Pirate now and begin having real sport this summer.

Bossert Pirates are built at the Bossert 32-acre plant and are backed by the Bossert half-century reputation.

BOSSERT PIRATES
Better Boats for Less Money!
Bossert Pirate, Jr. $330
Bossert Pirate Kid $285
Bossert Pirate Kid Knockdown.....$90
For further particulars either see your local dealer or write us.

LOUIS BOSSERT & SONS, Inc.
1345 GRAND STREET BROOKLYN, N. Y.

PATENTED

For outboards too!

NOW, after years of research and development by engineers, who have specialized in bilge water elimination, the St. Clair Self-Bailer is available for outboard craft.

This simple, effective and automatic device, built of high grade bronze, will withstand many years of the hardest service. It is made in two models—one for straight bottom boats; the other specially designed for hydroplanes.

Full details and prices on either the inboard or outboard types of St. Clair Self-Bailer will be gladly sent at your request. Write today for catalog; state whether for outboard or inboard. Sold by dealers and boatbuilders everywhere.

ST. CLAIR IRON WORKS
ST. CLAIR, MICHIGAN

Canadian Branch
Courtright, Ont.

Detroit Branch
8303 Woodward Ave.

Advertising index will be found on 3rd last page

CAPE COD BOATS

Before purchasing send for our complete catalogue and low price

CAPE COD BABY KNOCKABOUT
This model is brought out to meet the demand of various yacht clubs and individuals, a number of yacht clubs having adopted this boat as a standard racing class. Some clubs have fleet of 30 boats. All Cape Cod boats are standardized built.

POWER DORIES AND LAUNCHES
20 foot Motor Dories. Safest sea-going family boat built.
20 foot Runabout. Four cycle, four cylinder engine. A beautiful job.

ROWBOATS
10, 12, 14 feet long. Of various models. Strong, well-built and safe.

OUTBOARD MOTORBOATS
Various models for high speed, general utility and sea-going.

Boston Showroom at
New England Marine Sales Co.
882 Commonwealth Avenue

Cape Cod Ship Building Corporation

Showroom, Main Office and Works, Wareham, Mass.
Export Office, 25 Broadway, New York City
Branch Office, 18 Tremont street, Boston Mass

BRANFORD

ANNOUNCES

A NEW REMOTE CONTROL FOR

ELTO QUAD

1929 MODELS

AN efficient, smooth working, positive device which will control the motor speed from dead slow to wide open by merely turning the lever in the center of the BRANFORD steering wheel.

This device will be sold complete with all control wire, casing, clamps and attachments ready to install in the boat and in all cases is combined with either the BRANFORD racing or Runabout steerer, or can be used with steerers already delivered.

For prices and further information, write to

The Malleable Iron Fittings Co.
Branford, Conn.
or
The E. J. Willis Co., New York—*Eastern Distributors*

ASHBRIDGE FLYERS, $150.00

Most Consistent Winners

Class B—72 lbs., 11-9 x 44 Class C—79 lbs., 11-9 x 47
Class D—95 lbs., 11-9 x 50

Why not assemble this Speedy craft? You save freight. Knockdown $68.50. Partially assembled $72.50. All materials same as factory built and complete instructions furnished. Buy direct from factory. Greatest values ever offered. Full size paper patterns of each model $10.00. Our 18' "Do Luxe" Seagoing Runabout wins 2nd place in 151 class, July 4th, Long Beach, Calif. $450.00.

ASHBRIDGE BOAT FACTORY, Wilmington, Calif.
Most Speed per H.P.

COMBINATION POST LIGHT AND FLAG POLE SOCKET

For Class I and Outboard Boats
The sturdy one-piece construction of this light makes it ideal as a towing post. Made in one-piece casting; brass or aluminum highly polished.

T. & B. Type B. & B. Type

We save you money. Write for catalog showing prices and be convinced.
We specialize in repairing propellers.

Racing Propellers for Outboards

BRYANT & BERRY PROPELLERS
1282 LILLIBRIDGE STREET DETROIT, MICH.

No Waiting

As distributors, we can arrange prompt delivery on

Dee-Wite and Herbst Outboard Boats

Write today for literature and prices.

Skiboards, Penn Yan Dinghies and Outboards

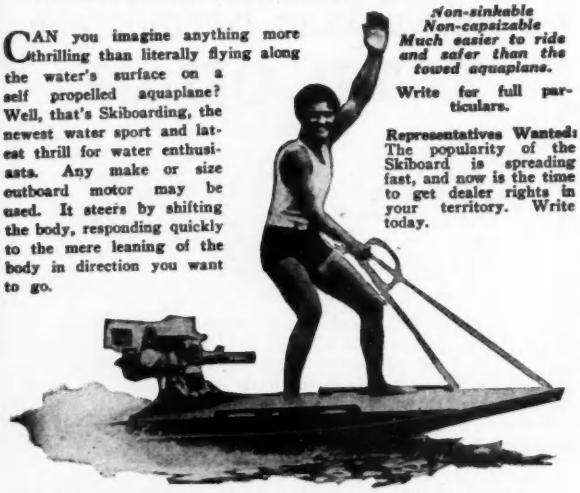
WILBUR H. YOUNG & CO.

250 W. 57TH STREET Telephone: Circle 2580 NEW YORK CITY, N. Y.

Skiboarding

A new and thrilling water sport

CAN you imagine anything more thrilling than literally flying along the water's surface on a self propelled aquaplane? Well, that's Skiboarding, the newest water sport and latest thrill for water enthusiasts. Any make or size outboard motor may be used. It steers by shifting the body, responding quickly to the mere leaning of the body in direction you want to go.



Non-sinkable
Non-capsizable
Much easier to ride and safer than the towed aquaplane.

Write for full particulars.

Representatives Wanted: The popularity of the Skiboard is spreading fast, and now is the time to get dealer rights in your territory. Write today.

DISTRIBUTORS: Boston: Atlantic Radio & Marine Co., Inc.; New York: Wilbur H. Young & Co.; Baltimore: The Tyler Co.; Wilmington, N. C.: HamLoc Marine Sales Co.; Rochester: Paul B. Martin; Los Angeles: B. H. Dyas & Co., Lakeside, Ohio: Worthy R. Brown & Son, Inc.; Cleveland: Barnes Boat Mart; Detroit: American Car & Foundry Co.; Chicago: Wilson & Richardson, Inc.; Louisville: The Barrett Co.; San Francisco: B. H. Hebgen Co.; Mt. Arlington, N. J.: Barnes Bros., Honolulu, Don Jacobson Motors, Ltd.

SKIBOARD CORPORATION
72 HUBBARD STREET BROOKLYN, N. Y.

Endorsed by Leading Outboard Drivers and Yachtsmen Throughout the Country

For YACHTING, MOTOR BOATING and OUTBOARDS

ONE-PIECE Waterproof and Windproof of double texture cloth with rubber vulcanized in between. Famous Rustproof Hookless Talon Fastener at front and sides of legs. Waterproof elastic at wrists, ankles and waist. Small spat to cover shoe. Easily put on—weighs but 36 ounces. Detachable Hood.

Khaki Color—$12.50 **White Color—$16.50**

"UTE"

The All-Weather Utility Suit

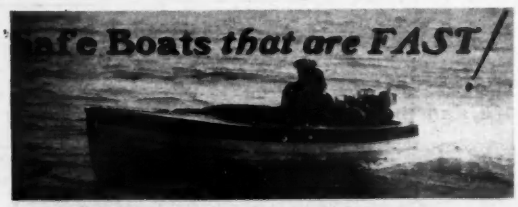
(Patent Pending)

If your dealer does not already stock UTE, send us your check and measurements and we will ship you UTE postpaid.

Sizes—Small, Medium and Large. Extra Large 10% extra.

UTILITY GARMENT CORP. (Dept. M.B.)
138 So. 9th Street Philadelphia, Pa.

DISTRIBUTORS and DEALERS: Write for full details of this new garment.



LYMAN Clinker-Built craft have won the plaudits of the boatwise wherever they are in use; for it is a FACT that a LYMAN can go out and give excellent account of itself regardless of weather or sea. The reputation which has been ours throughout half a century is your best insurance that a LYMAN fast outboard or speed tender offers the utmost in speed, service and satisfaction.

We are originators of Clinker-Built Speed Tenders and Fast Outboards!

LYMAN BOAT WORKS
Foot of First Street Sandusky, Ohio

Al Buffinton, Daddy of Outboards

(*Continued from page* 176)

thing would go and Al wondered, too. He yanked the cord, the motor put-putted and off he went.

Now, it was enough that Al did not realize that beneath his long, hairy coat he should have worn a cork waistcoat instead of layers of flannel, but still worse, he had no notion as to how and where Cutie would go. She was a 1926 model, with the style of a mortar-mixing box, yet no worse looking than the first gas-buggies. She had no fin or anything to act as a keel to lead her into the paths of righteousness. The planking was one-half inch thick where now it ranges from three-eighths to one-sixteenth of an inch. But she went at the marvelous speed of 16 miles per hour. How she went is another story.

Al, excited like a boy with a new toy, reveled in the success of his craft. It skimmed along the surface, bounded and dipped, skidded about in rollicking fashion, ducking in and out among the cakes of ice. It was great sport and the spectators on the shore were thrilled. Suddenly, Cutie, in a reckless mood, was seen heading towards the largest ice-cookie in the river. The crowd yelled a warning. Al's ears were deafened by the roar of the motor, but he saw the obstacle and avoided it. In the nick of time Eliza had jumped to safety while the bloodhounds on shore heaved a sigh of relief. But they got a kick out of it and outboard motor boating there and then took a long stride towards becoming the sport it is to-day.

If Cute Craft had had her moment of weakness and flirted with an iceberg, the trial was, however, a distinct success. Al came to shore, was cheered, congratulated, interviewed by reporters and finally had his picture taken. That the event attracted unusual interest and achieved success beyond all expectation was shown when, only six days later, an inquiry was received from Port au Prince, Haiti, asking for information about the craft. Within a fortnight orders for a dozen Cute Crafts were booked, which necessitated immediate plans for production in large volume. More of the hulls were ordered &and Cute Craft took her place among the many craft to be propelled by outboard motors that soon made their bows to the public. Al doffed his coonskin coat and got to work.

Whether we believe that Darwin was right or not, Cute Craft evoluted from the start of her meteoric career, with Al at the helm. She was given curves, thinned down and a fin added to the hull. From her initial speed of 16 miles an hour in the fall of 1926, the following early summer saw the Cute Craft outboard record climb to 29.396 in the Albany races. What more could be asked from a six-months-old youngster?

Success begets emulation as well as sporting rivalry. It was not long before many outboard craft were making fine performances and from these accomplishments germed the idea that an all-round motor boat regatta would further spur interest in the craft. The year 1927 saw the first of these regattas, in which Cute Craft figured most prominently in the East and South. Since events have flashed by quite as fast as the little outboards themselves, it may be sufficient to mention but a few of the many successes. At a regatta held in Boston, Mass., Cute Craft was awarded the Colonel E. H. R. Green trophy for the championship of the regatta; in the Hudson River Marathon, Cute Craft placed in first, second, fourth and fifth positions; at the Gold Cup Regatta in Greenwich, Connecticut, Cute Craft took the first four positions in Class B and at the Newport Regatta it won all positions in the Class B amateur events and the first eight positions in the Class B Free-For-All. It was a long step from Westport River and Al's red flannels blazing the way.

The year 1928, a year of unimagined speed performances, witnessed Cute Craft still in the fore, and among the records it established in all classes the most outstanding are perhaps those of 35.66 miles per hour in Class B and 39.44 miles per hour in Class C. It is also noted that in addition to an extraordinary record-making performance during the 1928 season, Cute Craft won further honors by taking first places at regattas held in Worcester, Springfield, New York City, Albany, Newport, San Antonio, Minneapolis. Kansas City, Charlotte, Savannah and a list of others too lengthy for inclusion.

By this time, an endurance contest was in order. The performance which perhaps attracted greatest attention, however, was the Boston to New York race in which Al, loading on provisions and driving the Cute Craft Magnum, completed the run of 150 miles in the shortest elapsed time of 13 hours and 40 minutes. The nature of this contest made it necessary to drive through open seas, cross rip currents, in fact, through all conditions that may be expected on an ocean cruise. Cute Craft, in spite of the trying conditions encountered, had roughed it and proved her speed qualities and seaworthiness.

The evolution in models continued. Anticipating the intro-

(*Continued on page* 198)

Advertising index will be found on 3rd last page

CHASE-EMERSON BOATS

Smart . . . Swift . . . Seaworthy . . . Safe

KNOWN the country over for the beauty of their lines and the soundness of their construction, Chase-Emerson Boats have easily taken their place as the "first quality" outboards. The 16-foot runabout in your choice of four beautiful color harmonies (shown above) or in mahogany finish . . . the 16-foot knockabout in mahogany finish . . . the Buckeye Junior . . . all represent an ultimate in outboards of the better type. Send for catalog.

"BUCKEYE JUNIOR"

The "Buckeye Junior" is the peppiest, staunchest 12′ 10″ outboard hull going. It's a speedy step hydroplane of Philippine mahogany, lapstrake constructed.

$195

F. O. B. Norwalk, Ohio

A. B. CHASE-EMERSON CORPORATION

11 West 42nd Street, New York — ***Factories: Norwalk, Ohio***

DISTRIBUTORS:

Boston, Mass.	*Chicago, Ill.*	*Milwaukee, Wis.*	*San Francisco, Cal.*
Walter H. Moreton Co.	Motor Mart	Edmund Gram, Inc.	Tilden Kienly Co.

Try This on Your Boat

Speed Model

STEP aboard a pair of these simple double aquaplanes, tow them behind your boat at any speed from five miles an hour up and get acquainted with the thrilling fun of this newest and greatest of water sports.

An aquaplane is great fun, but this is double the fun, double the control, double the variety and novelty. Twice as easy to ride, twice as easy to tow, twice as many stunts possible, you'll find a new interest in your boat after you've tried it.

For a child of five or a man of seventy—and all ages between—everyone finds the balance and control as instinctive and automatic as in standing or walking. Easily towed by any size or type of boat—an outboard, sail boat, cruiser or runabout—and as slow or fast as you please. Try it!

Three Types—Sport Model, Safety Model and Speed Model, $15 to $35

If your local boat or sporting goods dealer cannot supply you, write us.

LIBERAL DEALER DISCOUNTS

DOLPHIN AKWA-SKEE COMPANY
HUNTINGTON, LONG ISLAND, N. Y.

Also manufacturers of DOLPH, a new game to play on aquaplanes and Akwa-Skees. $5.00 to $15 a set. Ask us about it

Stunt Riders and all Equipment for Water Sport Acts Supplied for Regattas, Resorts, Exhibitions, Fairs. etc.

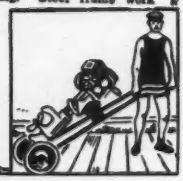
PATENTS PENDING

E.Z. CONVEYOR

Every owner of an outboard motor should own an outboard E. Z. CONVEYOR. Do away with that strenuous work carrying your motor back and forth. Makes a very fine working stand. Gives you lots of clearance to work on any part of your motor—it also keeps your motor from toppling over and many other advantages. It simply pays for itself over and over.

PRICE $20.00 F.O.B. BROOKLYN

These Conveyors are extremely rugged in construction—carry any type of motor on the market, all metal and enamelled to prevent rusting. Steel frame work with 12" roller bearing disc wheels with 1-3/16" rubber tires.



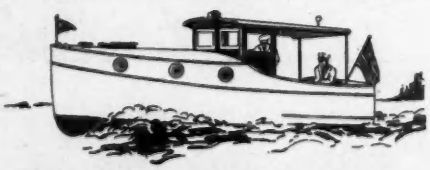
ON DISPLAY AT ALL GOOD MARINE DEALERS OR WRITE

E. Z. OUTBOARD MOTOR CONVEYOR, Inc.
1363-1367 East 28th St., Brooklyn, N. Y.

Order today to insure early delivery

Telephone Navarre 7216

Never Before Such a Small Cruiser Like This



Built for the Man Who Wants Outboard Cost of Operation

—plus the refinements and equipment of the average 30-footer. A large 4-cyl. outboard motor (entirely concealed) delivers 12-15 m.p.h.

Territory Franchises Open to Responsible Dealers

ROCHESTER BOAT CORP., 10 Charlotte Sta., Rochester, N. Y.

THE ROCHESTER "21"

Al Buffinton, Daddy of Outboards

(*Continued from page* 196)

duction of a new motor design for 1929, the Meteor Model, to accommodate the larger and faster motors, was added. The Meteor is a commonly termed 12-footer and the embodiment of new lines resulted in a hull that is extremely fast, as well as stable and a hull which, its designers believe, should prove worthy of the name Cute Craft for racing the more powerful motors.

The Cute Craft Sea Horse, a family runabout, was added and made an auspicious appearance at the Newport Regatta by winning first place in the Class C Free-For-All event. This model has also undergone some changes of line; a new bottom design greatly increased its speed and stability. The Sea Horse is 15 feet in length, 48 inches of beam and it carries a standard equipment; it will accommodate from one to four passengers at speeds ranging between 25 and 35 miles per hour.

Of the Cute Craft Bi-plane, which has justly gained world-wide attention through its credit records, little can be said. The knowledge that it has proven itself the fastest hull for A and B classes is responsible for the fact that no changes of line will be made and it is confidently expected that the Bi-plane model will continue as in the past by figuring prominently at the regattas held during this year.

The retrospective view of favorable results experienced since the first days of enthusiastic interest in outboards serves to form the nucleus of reasonably founded expectations for the future and these expectations in turn are most conducive to a firm belief that Cute Craft goes on to still greater records.

We have written much about Cute Craft and much about Al Buffinton's coonskin coat which graced the maiden voyage of the craft. Before concluding, a word about the man who helped considerably to introduce a thrilling new sport to the world is in order. If Al took to outboards he must have had a hankering for water which he inherited somewhere. His grandfather, John Buffinton, went down to the sea in ships at thirteen. There is much seafaring stock in the family tree . . . Al's father, however, broke the family precedent and became a landlubber, but conserved the sporting spirit in the family. He was pitcher for the Boston Champions, who won world's pennants in 1882 and 1893. He was one of the star twirlers when bicycle-handle moustaches the players wore elicited admiration from the grandstand.

Fall River claims Al as its son . . . he attended grammar schools there and then later graduated from the Cloyne School in Newport, R. I. His natural inclination towards the sea led him to choose the Navy for service in the World War. He attained the rank of Ensign and was assigned to one of the many submarine chasers. The war ended, he returned to his business which, at that time, concerned the tire and automobile supply trade.

Being an ardent fisherman, his leisure moments he spent in the pursuit of blackfish, cod and swordfish. It was on these excursions that the possibilities of outboarding dawned on him—if only as a way to give chase to speeding denizens of the deep who cut the water with their fins about him only to escape from his tempting hooks. An outboard motor was attached to a rowboat and travelled three miles an hour . . . the mortar-box followed, to undergo the changes we have mentioned. Now Al is manufacturing the craft on a high scale. Offices are maintained in Fall River while manufacturing is done at Webster, Mass. Distributors for the concern are now found throughout the United States and twenty-two foreign countries.

And it all started because Al WOULD be pushed to fishing!

MULLINS STEEL BOATS

Go where you want, as fast as you want, in a MULLINS STEEL KING. Never needs caulking or coaxing. Always ready for action. Made of Armco Ingot iron; it is rust-proof and puncture-proof.

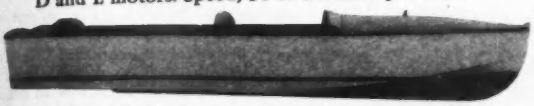
Write today for full details.

MULLINS MANUFACTURING CORPORATION

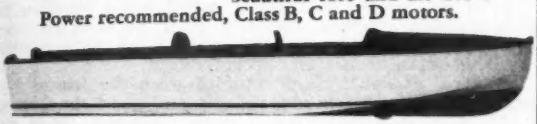
806 Depot Street **Salem, O**

BOYD MARTIN BOAT CO.
DELPHI, INDIANA

The Bullet Two models: Junior, 11-foot; Senior, 12½ foot. Genuine African mahogany. Power recommended, Class B, C, D and E motors. Speed, 30 to 50 miles per hour.



The Diana 16-foot, 4-passenger runabout. Beautiful fore and aft decks Power recommended, Class B, C and D motors.



The Mercury 16-foot family boat. 59-inch African mahogany deck. Power recommended, Class B, C and D motors.

Write for catalog and name of nearest dealer

BOYD MARTIN BOAT CO.
1064 Lee Street Delphi, Ind.

—BOYD MARTIN—

AT LAST—
A Cruiser Anybody Can Afford

FOR OUTBOARD MOTOR

This new Brooks Outboard Cabin Cruiser is 20½ feet overall—will sleep four people—has galley, toilet, ice box, extra gasoline storage—every known comfort. A Class D Outboard Motor drives her at fourteen miles per hour.

She is a wonderful buy—anywhere and anytime—and if you get her the Brooks way you can save two-thirds her cost.

Like all Brooks Boats, she comes knocked-down, with a complete set of plans. You put her together—easy, accurate, right. Send 10c. now for catalog and price list. You'll be surprised.

BROOKS BOAT CO., INC.
Dept. 3H
SAGINAW WEST SIDE, MICH.

PENN YAN BOATS

Water Thrills

Speed and pleasure—and a set of thrills entirely different from anything you have ever had on land—these are yours with an outboard boat!

For 20 years, Penn Yan has been building these things into its boats—"WATER THRILLS," the new 1929 48-page color Catalog will show the whole group, and a great variety of other small boats. It's a boat book you'll surely want. A copy is your for the asking. Write for it today!

PENN YAN BOAT CO., Inc.
15 Water Street - Penn Yan, New York

ACME OUTBOARDS

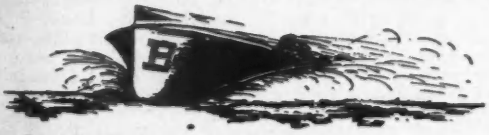
THE WASP—Fastest boat built for use with high speed motors. An exceptionally fast, husky craft with an impressive record of "wins."

THE RUNABOUT—Combines speed, roominess, comfort and cruising qualities. The boat everybody can enjoy—you, your family, your friends.

Literature covering these two Acme Models—also the custom built 18-ft. Acme Cabin Cruiser—upon request.

ACME BOAT COMPANY
812 Oak St. Miamisburg, Ohio

FASTER! . . . FASTER! . . . FASTER!
New Outboard Records Every Week!



—and at the bottom of it all—

BALUBRICOTE

THE BOTTOM COAT for FASTER BOATS
Cuts Down Water Resistance! Easy to Apply and Good for a Season!
Recommended by 15 A.P.B.A. Championship Winners
Ask your Dealer for BALUBRICOTE, or Order Direct from Makers—Quart, $2.00
BAHL CHEMICAL CO., 194 Elm St., Fall River, Mass.

Thompson BEATS the World on BOATS

OUTBOARD MOTOR BOATS—A complete line of strictly up-to-date racing models, good for over 30 miles an hour. Also some entirely new models for general pleasure use with a speed of 20 to 28 miles an hour. Built strong and durable and absolutely safe.

CATALOG FREE!

Rowboats $59.00 and up—The most complete line ever offered, at real money-saving prices.

Save Money Order by Mail

Please state the kind of boat you are interested in

Motor Boats—With or without Engine. Fast, handsome Craft at money-saving prices.

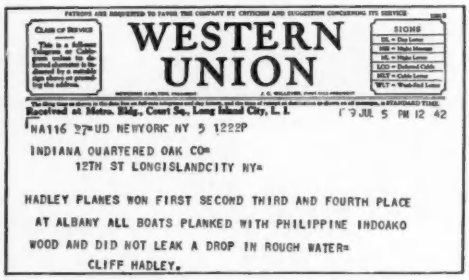
Two Large Factories

THOMPSON BROS. BOAT MFG. CO.
210 Ann St. 110 Elm St.
Pushtigo, Wisconsin *Write to Either Place* Cortland, New York

Good Boat Builders Prefer

Philippine INDOAKO Wood

for Planking


WESTERN UNION

Received at Metro. Bldg., Court Sq., Long Island City, L. I.

1929 JUL 5 PM 12 42

NA116 27=UD NEWYORK NY 5 1222P

INDIANA QUARTERED OAK CO=
12TH ST LONGISLANDCITY NY=

HADLEY PLANES WON FIRST SECOND THIRD AND FOURTH PLACE AT ALBANY ALL BOATS PLANKED WITH PHILIPPINE INDOAKO WOOD AND DID NOT LEAK A DROP IN ROUGH WATER=
CLIFF HADLEY.

If YOU want a winner, be sure YOUR next boat is planked with Philippine INDOAKO Wood—don't be satisfied with something "better" or "just as good"!

With over 4,000,000 ft. on our yards here, we can make prompt shipments of carefully selected CLEAR Philippine INDOAKO Wood.

INDIANA QUARTERED OAK CO.

222 East Avenue **Long Island City, N. Y.**

"BEST FOR BOATS"

ABSOLUTE SAFETY

Style No. 9

Only Kapok filled life preserver used on U. S. transports during World War

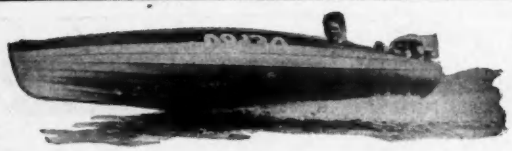
You can't sink while wearing a Kapo Coast Guard Jacket—4 times more buoyant than cork, yet soft and yielding to wear. Windproof, warm. Made according to Government specifications and approved U. S. Steamboat Inspector. Worn by Byrd, Chamberlin, and other successful transatlantic fliers. Removable Celbasilk inner padding. Has two pockets.

Specify O. D. or white. One size, easily adjustable from 36" to 44", price $13.00. Catalog free.

KAPO

Products Co.

Dept. M, 76-80 Traverse St., Boston, Mass.



Three Star Boat

Safe, Serviceable and Speedy

The Sensation of the Season

PIGEON HOLLOW SPAR CO.

131 Coleridge Street **East Boston, Mass.**

A DAY OF OUTBOARD GRIEF

July 4, 1929, will go down in the annals of outboard history as a day of universal grief in all classes and division at Long Beach, Calif.

As we ponder the score sheet, we are impressed with the preponderance of the D.N.F.'s which decorate the various heats, as also some D.N.S.'s interspersed throughout; and thereby hangs a tale.

Independence Day—riotous and lawless, is no day for fast outboards to race on public waterways.

There is a Federal law which specifically prohibits navigation by other craft upon a race course where a power boat race is under way; were it not for this fact, officials conducting regattas would have no authority to megaphone the skippers of runabouts which come tearing along the channels, oblivious to the fact that the little speedsters are running in competition at what for them is now getting to be a dangerous speed—approaching fifty miles an hour.

Adolph Felger, of Santa Barbara, was capsized by the wake of a runabout at Balboa recently and injured. The culprit in this case was warned by a red flag and the Commodore's request to slow down and veer off the course, but he defied this and proceeded to run around the course. Regardless of the warning and knowledge of the fact that a competitive race was in progress, a power boat, according to law, is responsible for any damage her wake may create.

July 4 is a lawless day, and a limited police patrol on the water was just not quite able to be at all points at once, and at one period, the Race Committee considered the advisability of calling off the remaining outboard events.

The thrill of the day was afforded when the famous Blue Streak, powered with an old 1928 Evinrude, and the Crandall Comet, equipped with the new Johnson Sea Horse SR-45, seesawed it out to a close finish for the latter.

Albert Keglovech, a 16-year-old novice, driving his first race, cleaned up in the Class C, Div. I and Class E, free-for-all events. He drove an H. K. Smith boat, Evinrude-powered.

Miss Hupmobile, driven by J. A. Bendowski, powered with a Sea Horse SR-45 on an F. J. Pierce hull, won the Class B event.

Dick Loynes ran his famous Miss California in the 151 Class without competition; Smiling Dan met with a mechanical mishap and Blue Streak, powered with the same motor he made the world's fastest mile, 47.29 m.p.h., with, unfortunately turned over.

POINT SCORES

Class B

1. Miss Hupmobile, driven by J. A. Bendowski and owned by T. H. Tupman.
2. Miss 233, driven by M. C. Martin.
3. Salome, owned and driven by A. G. Martin.

Class C, Division II

1. Crandall Comet, driven by John Adams, owned by Crandall Boat Co.
2. Blue Streak, driven by H. G. Ferguson, owned by Dr. Lee Baughman.
3. Miss 233.

Class C, Division I.

1. Black Mist, driven and owned by Al. Keglovich.
2. Black Maria, driven and owned by Al. Thomson.
3. Salome.

Class E.

1. Black Mist.
2. Miss 233.
3. Black Maria.

151 *Class.*

1. Miss California, driven and owned by Dick Loynes.
2. Ashbridge Flyer, driven and owned by Fred Ashbridge.

OUTBOARD MOTOR HELPS FIGHT FOREST FIRES

That, according to a report from Sault Ste. Marie, Ontario, Canada, is the latest use to which these popular little marine motors have been put. Recently a large number of Sea Horse 31 motors were sold to the Ontario Forest Patrol Corps for the use of the rangers in fighting the fires which threaten the forests throughout the Canadian province.

The Sault Ste. Marie airport of the Forest Patrol is the central base of operations of the Ontario force. From here the district forester governs the entire service. Sub bases, located throughout the province, are supplied with observer, air mechanic and complete sleeping equipment for the ground.

Each one of the patrol planes carries a Light Twin, which is used in going from the shore line to the plane, anchored at some distance. Very often the motors come into play in transporting men and supplies via water to the scene of the fire hazard.

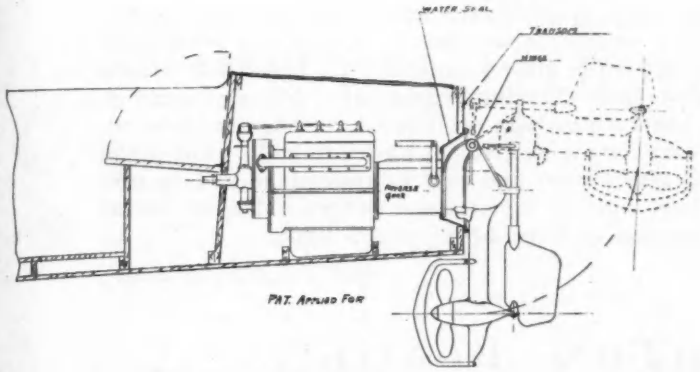
Advertising index will be found on 3rd last page

For the Family Boat

A *Real* INBOARDOUTBOARD

60 H.P. **150 POUNDS** **4500 R.P.M.**

Complete with Reverse Gear and Electric Starter



THE motor can be left safely locked under hatch cover, while the drive unit weighing only 25 lbs. can be detached and taken home.

Complete Line Includes 3-Unit, 4-Unit, 6-Unit and a *New 8-Unit in Line 151 Class Job*

ADDRESS ALL INQUIRIES TO

O. C. LINTHWAITE AHLBERG PLANT, 6301 Patricia Ave., CULVER CITY, CALIF.

OUTBOARD

BOATS MOTORS
PARTS REPAIRS
ACCESSORIES WINTER STORAGE
SPECIAL HULLS

Outboard Motor Headquarters

Bruno Beckhard

Flushing Bridge **Flushing, N. Y.**

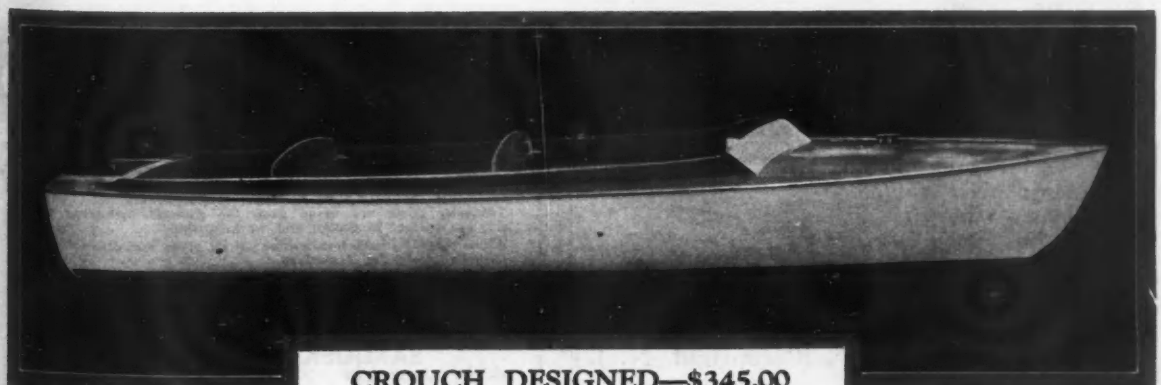
HERBST BOATS WIN

THE long and imposing list of Herbst victories and the many records created by these boats are convincing proof of their superiority.

Write to-day for name of nearest Herbst dealer and literature describing the complete Herbst line of racing boats and family runabouts.

Attractive Deferred Payment Plan

HERBST BOAT WORKS, INC.
WILMINGTON, NORTH CAROLINA



CROUCH DESIGNED—$345.00

GEORGE F. CROUCH INCORPORATED **MIDDLETOWN, CONN.**

Outboard Motor Boat Book

MoToR BoatinG's Ideal Series—Volume X

Plans *and* Instructions *for* Building Over 30 Outboard Boats *of* Various Types

THE scope of the craft, plans, specifications and building instructions given in this volume, is very broad. Everything is included from the smallest rowing dinghy suitable for a Class A Outboard Motor up to the fastest Class C racing hydroplanes. Plans of some of the outboard racing boats which have established records are included. All of the boats are easy for the amateur or novice to build. The plans and designs are particularly clear and easy to understand and no previous knowledge of boat building is necessary to turn out a successful boat. You should not fail to have a copy of this book.

Price, $3.00 **Mail Your Order Today**

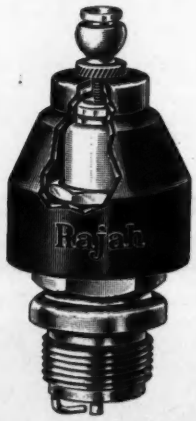
Foreign Postage, 50 cents extra

MoToR BoatinG

57th Street at 8th Avenue, New York City, N. Y.

Send for circular describing all of MoToR BoatinG's books on motor boat building, operation and navigation

Rajah Spark Plug HOOD Prevents Shorting by Water or Spray!



The new Rajah Bakelite HOOD will prevent water and spray from shorting your spark plugs.

Fits all makes of spark plugs

Completely shields porcelain thereby lessening danger of breakage. Easy to install — attached or removed in a second.

Especially made for engines on outboards and motor boats.

RAJAH SAFETY NIPPLES

stretch over the terminal and insulator of any plug, making a water-tight job. Also fits new Bakelite HOOD.

Order today from your dealer or send direct to us

The Rajah Company, Bloomfield, N. J.

25 miles an hour with four passengers. All mahogany. 17 ft. "V" Bottom Runabout. $375. Send for our beautiful catalog of Inboard and Outboard Runabouts.

DUNPHY BOATS

DUNPHY BOAT MFG. CO. **Dept. MBG-8** Eau Claire, Wis.

Save with SANDUSKY BOATS

IF you want a speedy little sport boat or a staunch family outboard runabout you'll get the best from Sandusky—AND SAVE 15% TO 25%. Sandusky boats are made from the choicest mahogany wood and are perfect in design and workmanship.

Write today for free information on all types and prices. ***Dealers write for franchise.***

SANDUSKY BOAT WORKS

304 MEIGS STREET SANDUSKY, OHIO

Advertising index will be found on 3rd last page

Announcing

STANNUS SERVICE WHEELS

Designed and perfected for C, D and E class motors. Run at maximum efficiency with or without load. Ideal for use with runabout type hulls.

Service Wheel Price $12.00

Win With

STANNUS SPEED WHEELS!

Consistent with STANNUS performance everywhere, motors equipped with STANNUS Speed Wheels finished first, third, fourth and sixth, winning Grand Prize and also first place in Class B in Belle Isle Marathon conducted by the Detroit Outboard Association.

A Stannus Wheel on your motor puts victory in your grasp. Order one to-day and be a winner.

Price $10.00

STANNUS PROPELLER CO.
3401 Illinois Street Detroit, Michigan
Every Genuine Stannus Wheel is stamped STANNUS.

AIRSHIPS

four Aces

♠ THE 16-FT. SPEED RUNABOUT

♥ THE 12-FT. AQUA AERO

♦ THE 14 FT. SPORT RUNABOUT

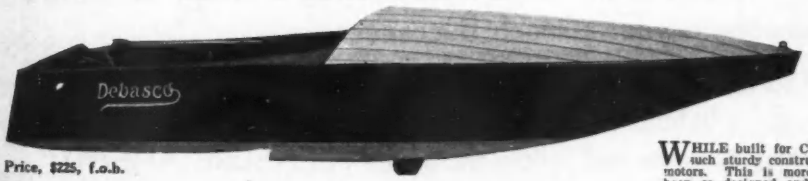
♣ THE 16-FT. SEDAN RUNABOUT

Complete Descriptions on Request

Sole Distributors

V. WITHSTANDLEY & CO., INC.
11 Central Park West at Columbus Circle, New York

DEBASCO JUNIOR — *New Class B Racer*



Companion Boat to the Famous DEBASCO CHAMPION

Price, $225, f.o.b.

Length, 10 ft.; Beam, 48 in.; Weight, 115 lbs.; Transom, one-piece Philippine Mahogany. Sides, one-piece Philippine Mahogany. Bottom, Philippine Mahogany—battened. Frames, spruce. Decking, highest grade blue and gold Fabrikold. Fastenings, copper rivets, brass screws, brass rods, and mahogany knees. Finished with several coats of Valspar Varnish.

WHILE built for Class B racing the DEBASCO JUNIOR is of such sturdy construction that it will carry with ease the larger motors. This is more than a one season boat. The bottom has been so designed and the step so arranged that the boat planes with ease and while planing only a very small portion of the bottom is in the water, eliminating resistance. We predict new records with this boat.

Write today for full particulars and ask about our Easy Time Payment Plan.

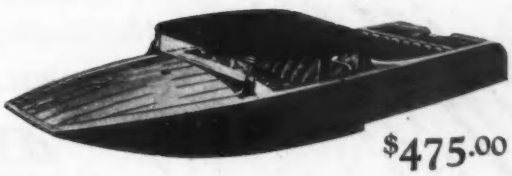
DELAWARE BAY SHIPBUILDING CO., Inc., Custom Yacht Building, Leesburg, N. J.

Oceans of Pleasure and Thrills—

The STEP-SLED

De Luxe Cabin Sedan
For Six Happy Joy Seekers

An Exceptional Value at a Very Moderate Price



$475.00

OPEN MODEL, $375 RACER, $210 CRUISER, $915

Dealers: An attractive franchise is available in choice territories.

PATE-PARKES MFG. CO. - - NASHVILLE, TENN.

Pleasure Ahead!

with a

LUDINGTON BUCCANEER

There's an island several miles off the mainland with inviting caves waiting to be explored -- and cool grassy spaces surrounded by shady trees. Ideal for a picnic! Far away? Only about seven miles, a matter of a few minutes in your staunch Buccaneer.

And the inland waterways--they too invite you to leave your troubles behind--to seat yourself in one of the Buccaneers' roomy cockpits and follow the sign, "PLEASURE AHEAD."

FULLY EQUIPPED—READY TO RUN
16 foot Mahogany Vee Bottom Runabout.

Automobile type steering wheel, throttle control and motor shut-off. Mooring cleats, two fenders and fender hooks, running lights, mahogany flag poles, 5 foot paddle, life saving equipment for five people. Kapoc stuffed cushions, brass bilge pump, Pyrene fire extinguisher with bracket, whistle, ten pound stockless anchor with 25 foot manila anchor rope, 2 sets of pilot rules and regulations.

Also Makers of the Famous Racing Boats, "Flash" and "Lightning"

"BUILT FOR A TWO-REEF BREEZE"

LUDINGTON

LUDINGTON AIRCRAFT, INC.
808 Atlantic Bldg. Philadelphia, Pa.

LUDINGTON AIRCRAFT, INC.
808 Atlantic Bldg. Philadelphia, Pa.

Please send me without obligation additional literature, prices and name of dealer nearest to me.

Name.....

Address.....

Advertising index will be found on 3rd last page

Does your engine overheat?

It may be due to:

1. Trouble in lubrication or cooling systems
2. Excessive carbon deposits
3. Improper carburetor adjustment
4. Retarded spark
5. Incorrect valve or ignition timing
6. Stuffing box too tight

Does your outboard lack power?

What do you do when your engine stops suddenly?

These and many other questions are answered in the 1929 Edition of the Motorboat Book issued by the Vacuum Oil Company.

"Correct Lubrication for Motorboat Engines—1929" (its full name!) ought to be read by every motorboat owner.

In this handbook, experienced Marine Engineers explain in clear, concise terms the results of their scientific analysis of lubricating requirements in every type of modern motorboat engine.

You will find this a valuable reference book of information on all phases of motorboat engine operation. We will gladly send a copy free of charge.

Contents

Speed—what it demands in Lubrication
Lubrication precautions
Engine operating precautions
The outboard motor
Outboard motor troubles
Motor engine troubles
Diesel engines
Surface ignition oil engines
Mobiloil chart of Recommendations (Inboard motorboat engines)
Universal joints—Recommendations
Outboard engine Recommendations
Reverse gears—Recommendations
Diesel and oil engines—Recommendations
Navigation and equipment information

MAIL THIS COUPON NOW!

Vacuum Oil Company,
Marine Sales Dept. B-8,
61 Broadway, New York City.

Please send me without obligation, a copy of your new booklet, "Correct Lubrication for Motorboat Engines–1929."

Name_____
Street_____
City_____ State_____

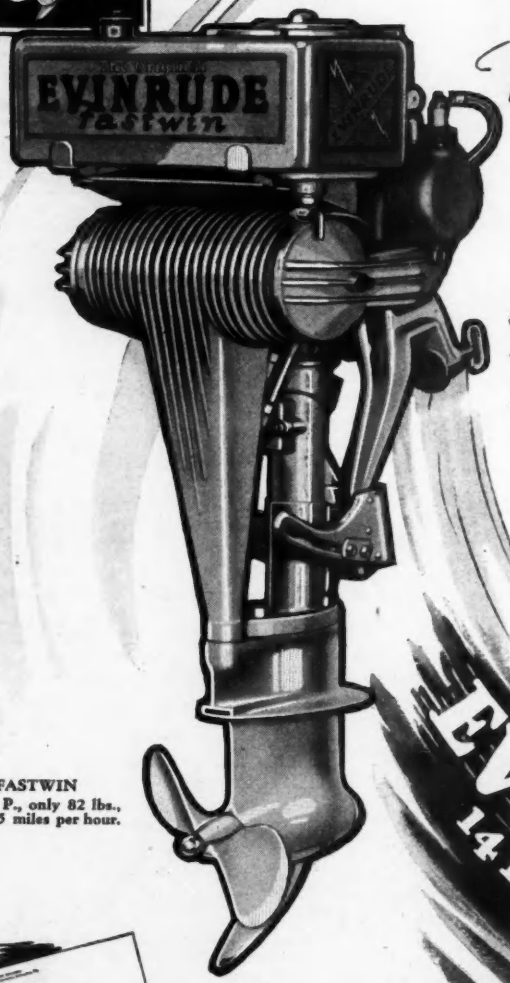
the New Mobiloil

GARGOYLE

We Copied It from Speeditwin —and It Sells for $40 Less

20 H. P. Speeditwin

CAN YOU TELL THE DIFFERENCE?



FASTWIN
14 H. P., only 82 lbs.,
5 to 35 miles per hour.

LOOK again at the two motor photographs—20 horse power Evinrude Speeditwin on top, 14 horse power Fastwin below. You can't tell which is which, *and we meant it so to be!*

Fastwin is simply a smaller edition of Speeditwin, and that's about the finest compliment that could possibly be written. Only 3/4" shorter, only 1 1/8" less width from one cylinder end to the other—but every dimension encompasses Speeditwin features and quality, truly famous the world over.

Fits Nine Types of Boats

Fastwin fits nine types of hulls—from light, square-stern racing canoe to small cruiser. If you want Speeditwin superiority in 14 horse power size, only Fastwin will give it. The price is $190 f. o. b. factory.

EVINRUDE DIVISION
Outboard Motors Corporation
1131-27th Street, Milwaukee, Wis.

EVINRUDE
14 H.P. FASTWIN

Write Today!

With Free Evinrude 32-page Year Book, containing over 125 illustrations of record holding boats and outboard motor water sports, we will also send this special circular "The Answer to 'What Model Motor to Buy?'"

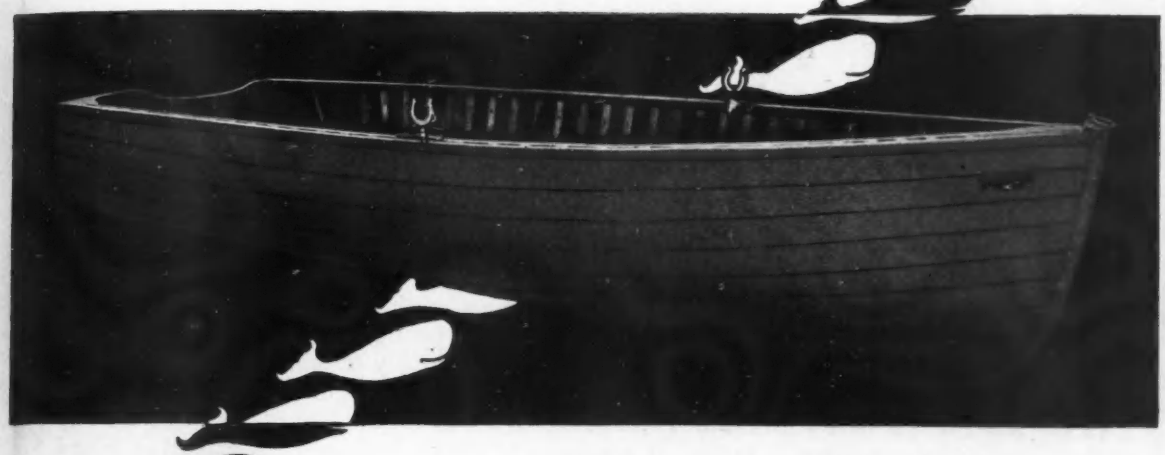
Evinrude Distributors — Sales and Service:

Ford Road and River Blvd., Minneapolis, Minn.
First Street near Front, Norfolk, Va.
115 E. 23rd St., New York City, N. Y.
259 Atlantic Ave., Boston, Mass.
117-119 Broadway, Oakland, Calif.
124 Second St., Portland, Ore.
79 Columbia St., Seattle, Wash.
6304 E. Jefferson Ave., Detroit, Mich.
64 King St., West, Toronto 2, Ont., Canada
539 Carondelet St., New Orleans, La.
115 Broadway, Houston, Texas.

Advertising index will be found on 3rd last page

BABY WHALE

Speed Tender



Wins 150-Mile Cape Ann Marathon

GLOUCESTER, MASS. JUNE 15th.

COMPETING against twelve prominent drivers and nine different makes of boats, Russell Stearns, driving the only Kelley boat entered, won the gruelling 150-mile Cape Ann Marathon at Gloucester, Mass., on June 15th. Stearns used an eleven-foot Baby Whale speed tender powered with a Johnson Sea Horse "32", making an average speed of 32.2 miles per hour for the 150 miles. Thus, once again Baby Whale construction is victorious over the finest that the industry has to offer.

The Baby Whale speed tender is mahogany planked, lap-strake constructed and copper riveted. While it makes a superb racer, it is ideal for family use or as a yacht tender. It seats six comfortably and performs admirably with any make or size motor.

A BABY WHALE for Every Purpose

11 ft. BABY WHALE *Round Bottom Mahogany Lap Strake Tender —Seats Six*

12 ft. BABY WHALE *Mahogany Step Plane—Seats 2*

13 ft. BABY WHALE *Round Bottom Mahogany Lap Strake Tender —Seats 7*

14 ft. BABY WHALE *Mahogany Step Plane—Seats 2*

14 ft. BABY WHALE *Mahogany Semi-Runabout Type Step Plane—Seats 3*

15 ft. THE WHALER *Round Bottom Mahogany Lap Strake Family Runabout—Seats 9*

Write today for literature, describing and illustarting the complete Baby Whale line including the famous Baby Whale step planes.

New York Distributors:
H. Mikkelsen **44 Warren Street** **New York, N.Y.**

D. N. KELLEY & SON, INC. The Famous Whaling City BOATS **FAIRHAVEN, MASSACHUSETTS**

The
Outboard Motor Boat Book

MoToR BoatinG's

IDEAL SERIES—VOL. X

Plans, Specifications and Building Instructions for Over 30 Craft of Various Types and Sizes Suitable for Powering with Outboard Motors

THIS is the book which everyone has been waiting for. The scope of the craft, plans, specifications and building instructions which are printed in this volume, is very broad. Everything is included from the smallest rowing dinghy suitable for a Class A Outboard Motor up to the fastest Class C racing hydroplanes. Plans of some of the outboard racing boats which have established world's records are included. All of the boats are easy for the amateur or novice to build. If you wish to use the boat on the seaboard or inland waters or on some lake or smaller body of water you will find a design which is suitable. If you are partial to sail and use the outboard as an auxiliary to get home with should the wind fail, you will find a number of designs of these boats, too. The plans and designs are particularly clear and easy to understand and no previous knowledge of boat building is necessary to turn out a successful boat. You should not fail to have a copy of this book.

A complete summary of the contents of Volume X follows:

Contents of

THE OUTBOARD MOTOR BOAT BOOK

Skipper, 8-Foot Pram Type Outboard Boat
Baby Stepper, 14-Foot Class C Racing Hydroplane
Apple Sauce, 10-Foot Racing Hydroplane
Toto, 16-Foot Stepless Outboard Boat
Jazz Bug, 12-Foot Hydroplane
Pirate, a 39-inch Model Sloop
A 12-Foot Dinghy
Buster, 12-Foot Sailing Dinghy
Smarty, 14-Foot Outboard Sailing Utility Boat
Jan, 9-Foot by 3-Foot Sailing and Outboard Boat
Snapper, 12-Foot Round Bottom Sailing Dinghy
Whiz, 13'6" Hydroplane
Sue, 15-Foot Motor Skiff
Whiz, 16-Foot Baby Buzz Outboard Speedster
Transco, 18-Foot Outboard Runabout
Sharpie, 9-Foot Flat Bottom Dinghy
Kingfisher, 14-Foot Fishing Skiff
Canvasback, Outboard Canoe
Gannet, 12-Foot Sailing Skiff
Green Diamond, 12-Foot Outboard Hydroplane
Nonpareil, 14-Foot Outboard Cruiser
Sea Shell, 17-Foot Service Boat
Marybelle, 14-Foot Runabout
Flattie, 16-Foot Utility Boat
Edith, 15-Foot Vee Bottom Boat
A 10-Foot Scow Type Boat
Rinky-Dink, Seven Feet of Boat
Handy-Andy, an 8-Foot Sailing Dinghy
Carryme, a Utility Dink
Takapart, a Folding Punt
Anabelle, The Dink for Aragon II
Nymph, a 10-Foot Sailing Dinghy
Dancer, a 12-Foot Dink
Scandal, 14-Foot Outboard Motored Boat
Pixie, a V-Bottom Row Boat
Gozo, 16-Foot Auxiliary Sloop

Send for circular describing all of MoToR BoatinG's books on motor boat building, operation and navigation.

Price, $3.00 ***Mail Your Order Today***

Foreign Postage, 50 cents extra

MoToR BoatinG

57th Street at Eighth Ave., New York City, N. Y.

Advertising index will be found on 3rd last page

Cable Address:
Brokerage, New York

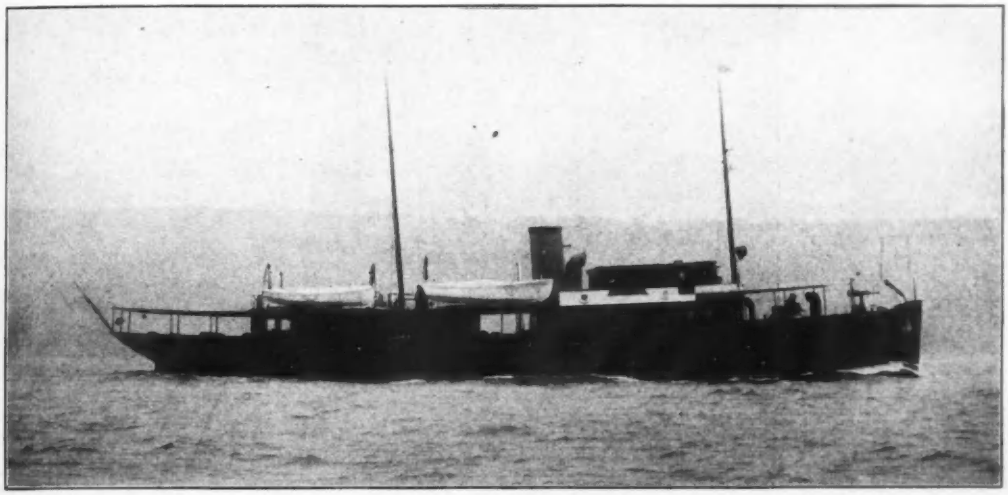
COX & STEVENS
INCORPORATED

Telephone:
Vanderbilt 8011

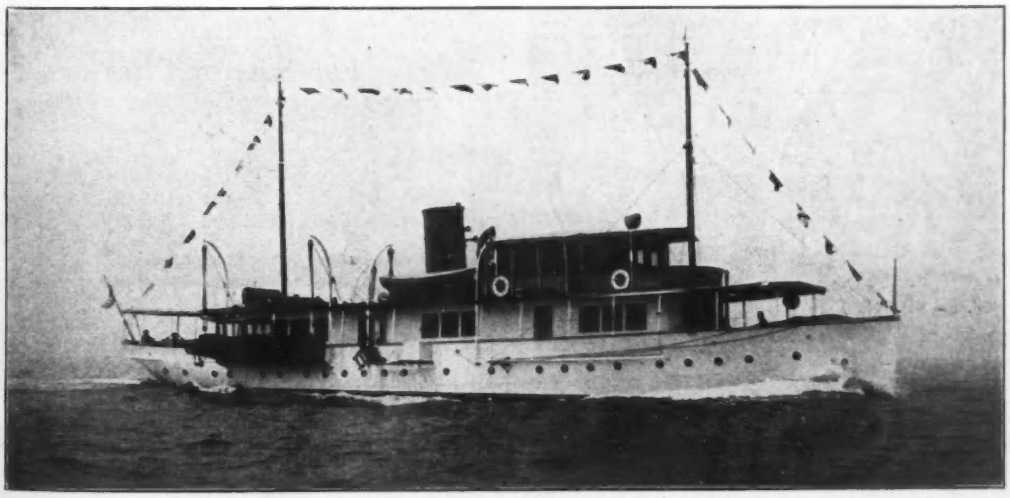
Detroit
Barlum Tower, Cadillac Sq.
Telephone: Cadillac 6566

Naval Architects Yacht Brokers

New York
521 FIFTH AVE.
Corner 43rd Street



No. 4868—FOR SALE: (September delivery):—Ocean-going, steel twin-screw Diesel Yacht. 160 ft. overall, 26 ft. 7 ins. beam, 11 ft. draft. Speed up to 14 knots; two 6-cyl. 450 H.P. Winton Diesel motors. Cruising radius 7500 miles. Dining saloon located in forward deckhouse and living room in after house. Below are five large and airy staterooms and three baths. All modern conveniences. Beautifully furnished. Price attractive. In commission.

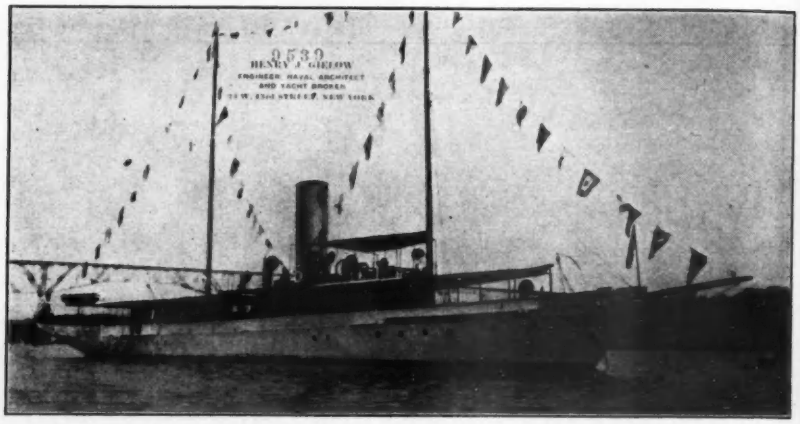


No. 5395—FOR SALE BY ESTATE:—Steel, twin-screw 130-ft. Diesel Yacht. Two 6-cylinder 225/250 H.P. motors. Large cruising radius. Large deckhouse containing dining saloon, galley, owner's office and living room. Below aft are six staterooms, two of which are double, three baths and four toilets. Large deck-space with enclosed windshelter at after end of deckhouse. An inside passage is provided so that any part of the yacht can be reached without going on deck. Modern and up-to-date. Further particulars and price upon request.

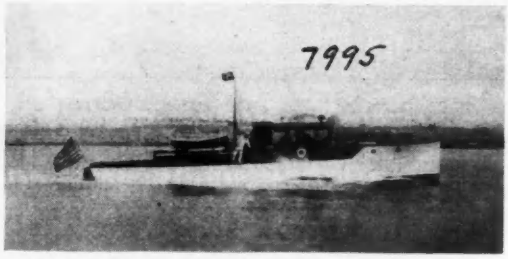
HENRY J. GIELOW INC.

Designers of America's Finest Yachts

FOR SALE



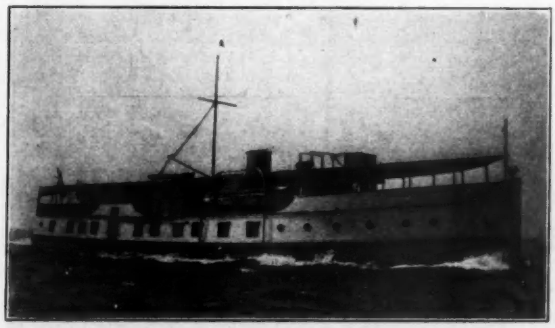
SINGLE SCREW SCHOONER, Length 175 ft., 5 in. Cruising speed 15 knots. Clipper bow. Dining salon, social hall and main salon. Two double, two single staterooms, two baths. Good condition and offered at a very reasonable figure.



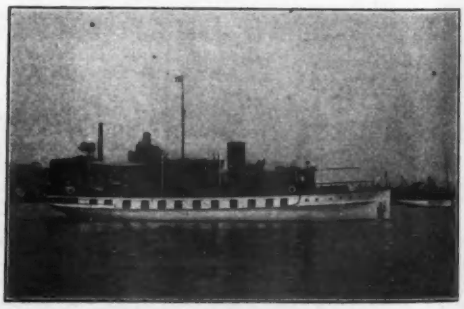
7995—FOR SALE—In commission. Most attractively priced. 62-foot express cruiser, Sterling motors, speed 20 miles. Stateroom and two saloons sleep six. Toilet and shower bath. Comfortable cockpit and bridge deck. Seen near New York and demonstrated by appointment. Fine condition.

What type of boat are you looking for? Those on this page represent but a few of the many yachts that we have listed for sale and for charter. This organization is prepared not only to supply you with the vessel which will exactly meet your requirements but will also arrange for all necessary details pertaining to its operation. Tell us of your desires. It is certain that we can be of material assistance to you.

For Sale or Charter



TRIPLE SCREW HOUSEBOAT. Length 120 ft., 9 in. Cruising speed 10 knots. Five staterooms, four baths. Finely fitted and furnished, and in excellent condition.



TWIN SCREW CRUISER HOUSEBOAT. Length 98 ft., 6 in. Cruising speed 13 miles. Splendid for Florida or northern waters and a very able sea boat.

NAVAL ARCHITECTS
ENGINEERS
YACHT BROKERS

25 West 43rd Street, New York

DETROIT
FISHER BUILDING

MIAMI
INGRAHAM BUILDING

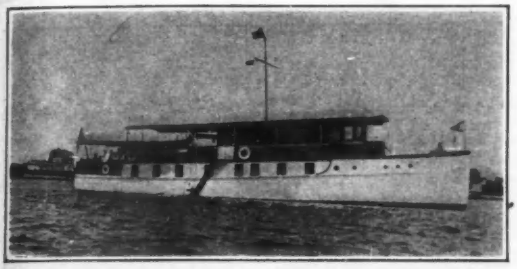
PHONE BRYANT 7670
CABLE ADDRESS, CROGIE.
A B C CODE

Advertising index will be found on 3rd last page

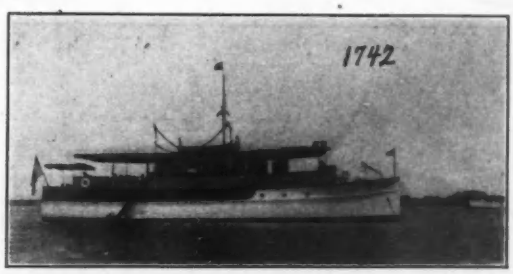
TAMS & KING

INCORPORATED

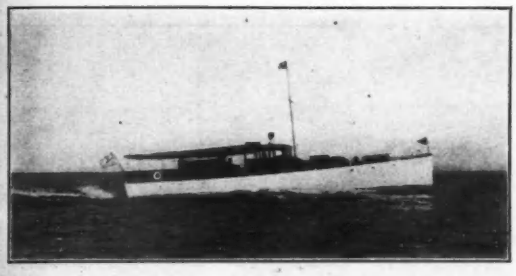
250 Park Avenue — **New York City**



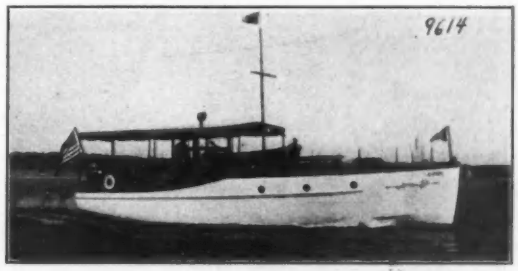
1856—For sale: A comfortable Twin Screw Cruiser of the houseboat type. L. o.a. 78′, Beam 15′ 3″, Draft 4′ 6″. Admirably suited to cruising in Florida. Powered with 2 Speedway Motors, 115 H.P. ea.



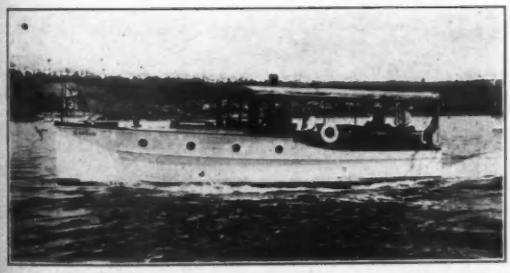
1742—For sale: One of the popular Houseboat cruisers, designed and built by the New York Yacht, Launch & Engine Co. L. o.a. 67′, Beam 15′ 6″, Draft 3′ 3″. Powered with two 20th century motors, 100 H.P. ea.



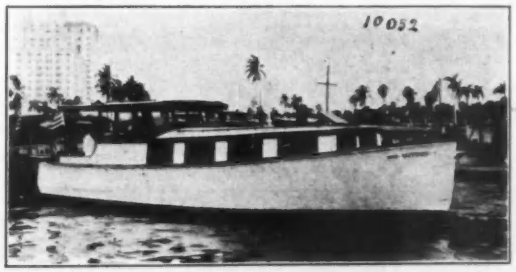
9969—This attractive boat for sale: Length overall 65′ 5″, Beam 13′ 7″, Draft 3′ 9″. Designed and built by Luders Marine Construction Co. and powered with two Winton gasolene motors.



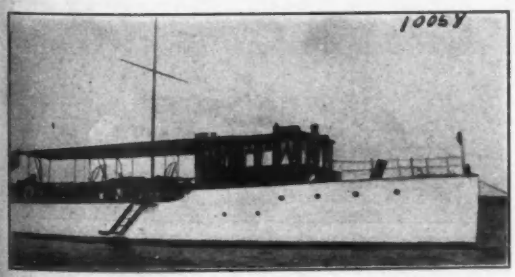
9614—This Attractive Cruiser for Sale—L. o.a. 38 feet, Beam 10′, Draft 3′ 6″, built in 1923. Powered with Kermath motors.



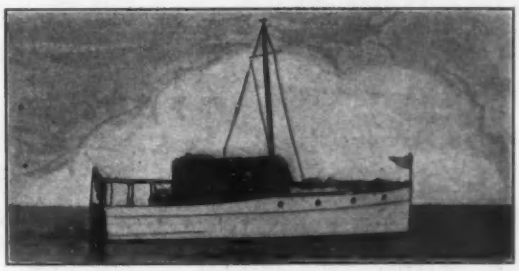
10073—For sale: Motor Cruiser. L. o.a. 36′, Beam 9′ 2″, Draft 2′ 11″. Built 1924. Powered with W. S. M. Motor.



10052—For sale: L. o.a. 37′, Beam 10′ 8″, Draft 2′ 10″, built 1929. An ideal Shoal Draft Fishing and Cruising Boat. Powered with a Universal 6-cylinder motor. Now in commission near New York City.



10058—Cruiser for sale: L. o.a. 55′, Beam 12′, Draft 3′ 6″. Built in 1928 and powered with 100 H.P. Lathrop motor.



10042—Cruiser for sale: L. o.a. 34′, Beam 9′ 4″, Draft 3′. Built by Richardson in 1927 and powered with two Gray motors.

MARINE ARCHITECTS
ENGINEERS

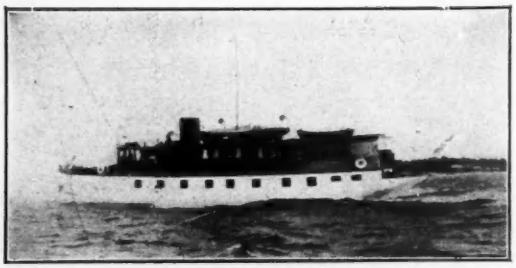
YACHT BROKERS
MARINE INSURANCE

JOHN H. WELLS, Inc.

Service that's different

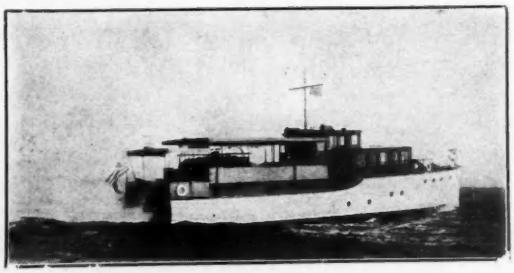
11 East 44th Street, New York, N. Y.

Telephone: Murray Hill 3128

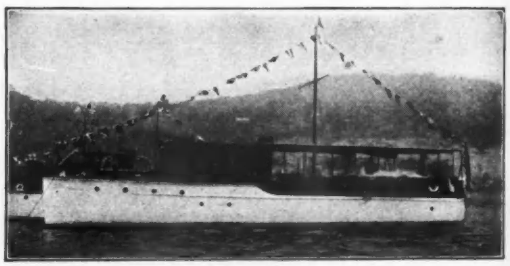


NO. 1106—FOR SALE—Twin Screw Houseboat. Length o.a. 92′; beam, 18′; draft, 4′. Powered with two 6-cylinder Winton Motors. Speed 14 m.p.h. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.

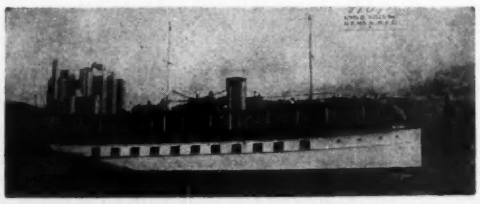
NO. 620—FOR SALE—Raised deck cruiser. Length o.a. 72′; beam, 14′3″; draft, 4′3″. 2-150 H.P. Winton Gas Engines, speed 14 m.p.h. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.



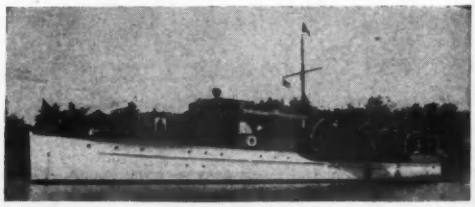
NO. 968—FOR SALE—Raised Deck Cruiser. Length o.a. 75′; beam, 13′9″; draft, 3′10″. Powered with two 6-cylinder Sterling Petrels. Speed 14 m.p.h. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.



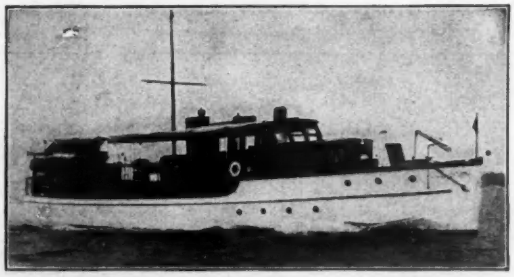
NO. 999—FOR SALE—Raised Deck Cruiser. Length o.a. 55′; beam, 12′; draft, 4′6″. Powered with 100 H.P. Lathrop Gas Engine. Speed 12-14 m.p.h. In perfect condition. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.



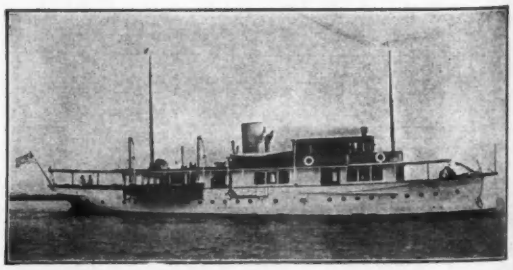
NO. 1107—FOR SALE—This completely equipped houseboat. Exceptionally well furnished. Length o.a. 87′6″; beam, 18′2″; draft, 4′. Capable of 12 m.p.h. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.



NO. 365—FOR SALE—Cruising Power Yacht. Length o.a. 93′; beam, 15′; draft, 5′6″. 2-80 H.P. Winton Motors. Speed 12-14 m.p.h. Has been completely refurnished and refinished. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.



NO. 342—FOR SALE—Twin Screw Cruiser. Length o.a. 78′; beam, 13′; draft, 3′3″. Powered with two 8-cylinder 5¼x7 Speedway motors. Speed 20 m.p.h. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.

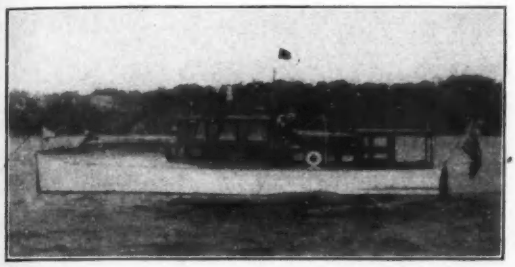


NO. 413—FOR SALE—Twin Screw Diesel Yacht. Length o.a. 129′; beam, 23′; draft, 6′6″. Two 6-cylinder Winton Diesel Engines. For full particulars, apply to JOHN H. WELLS, Inc., 11 East 44th Street, New York, N. Y.

WILLIAM M. ELDRIDGE, Inc.

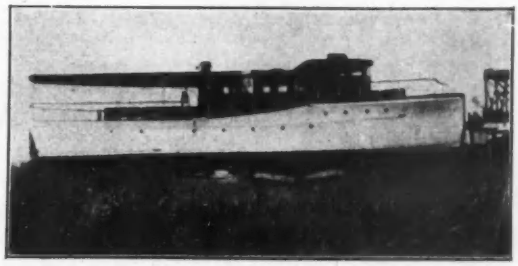
347 Madison Avenue Telephone: Murray Hill 0941 New York, N. Y.

MARINE ARCHITECTS-YACHT BROKERS-MARINE INSURANCE



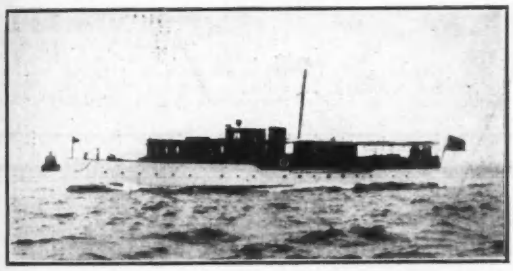
1033—45′ express cruiser guaranteed in beautiful condition. New July, 1928. Sleeps six. Cruising speed 25 miles per hour.

William M. Eldridge, Inc.
347 Madison Ave.
New York City, N. Y.



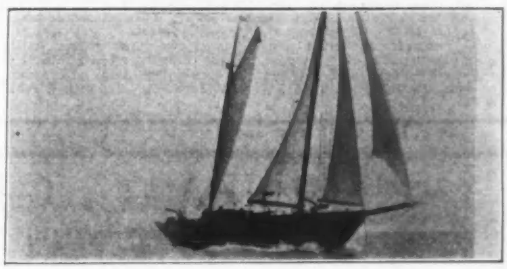
2524—Exceptional offer, 65′ o.a. Twin Screw Diesel yacht, beautifully finished. Offered at attractive price for quick sale.

William M. Eldridge, Inc.
347 Madison Ave.
New York City, N. N. Y.



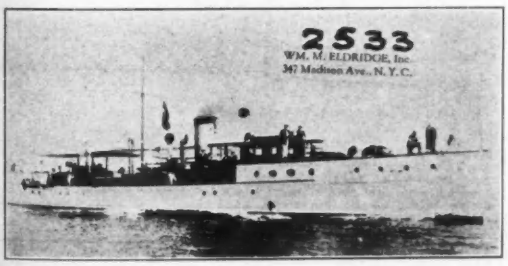
1060—For sale or charter: Twin Screw Cruising Yacht. Accommodations for 8 in owner's party. Recently refurnished. Exceptionally low figure for quick sale.

William M. Eldridge, Inc.
347 Madison Ave.
New York City, N. Y.



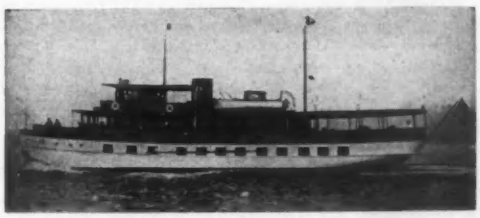
3053—Diesel Auxiliary Ketch for sale or charter 89′ o.a. Considered finest of her type. In full commission.

William M. Eldridge, Inc.
347 Madison Ave.
New York City, N. Y.



2533—115′ Oil burning steam yacht. Built by Herreshoff. Just being placed in commission for sale or charter.

William M. Eldridge, Inc.
347 Madison Ave.
New York City, N. Y.



2016—Sale or charter 100′ house-boat Twin-Screw, Winton Motors. Sleeping accommodations for 8 persons.

William M. Eldridge, Inc.
347 Madison Ave.
New York City, N. Y.

It is our aim to offer our services to a Clientele that demands Yachts of the better sort.

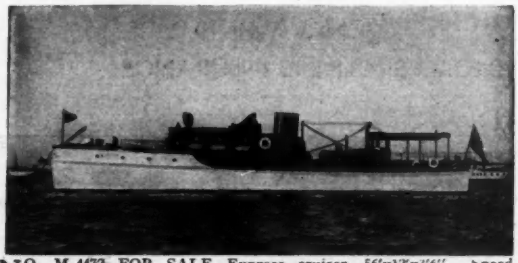
If you desire to purchase or dispose of a Yacht of the better sort our organization is particularly fitted to meet such requirements.

Branch Office:
City Island
New York City
Opposite Nevin's Shipyard

DRAKE H. SPARKMAN
Yachts of All Types for Sale and Charter

11 EAST 44th ST.
NEW YORK

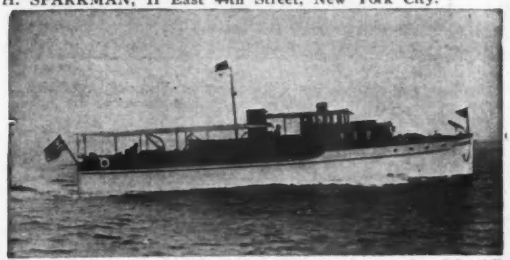
Telephone:
Vanderbilt 2685



NO. M-4472—FOR SALE—Express cruiser, 56'x12'x3'6". Speed up to 20 miles. Large stateroom aft with wardrobe and toilet room, engine room amidships with deck saloon over and crew's quarters and galley forward. Has always had the best of care. DRAKE H. SPARKMAN, 11 East 44th Street, New York City.

NO. M-3388—FOR SALE—Twin-screw express cruiser, 60'x11'8"x 3'. Built 1927. Large deck dining saloon, two double staterooms in owner's quarters. Sterling motors. Delivery in commission. For further data, price and location, consult DRAKE H. SPARKMAN, 11 East 44th Street, New York City.

NO. M-4398—FOR SALE—Elco 45' cruiser. Large double stateroom; main cabin sleeping two; two toilet rooms, galley and separate quarters for paid hand. Located New York. In excellent condition throughout. For further data, price and location, consult DRAKE H. SPARKMAN, 11 East 44th Street, New York City.

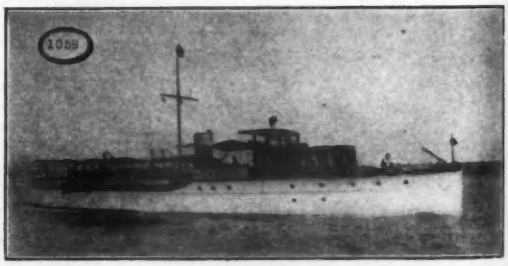


NO. M-3320—FOR SALE—Twin-screw gasoline yacht, 72'x14'6"x 3'6". Built 1926. Large deck house, two double and one single staterooms. Two toilet rooms, shower, etc. All modern conveniences including hot running water, ice machine. Delco lighting plant, etc. Sterling motors. DRAKE H. SPARKMAN, 11 East 44th Street, New York City.

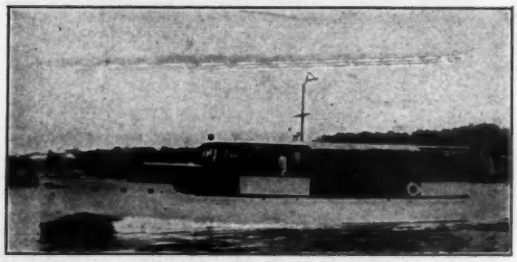
HENRY C. GREBE & CO., Inc.

Wrigley Building: 400 NORTH MICHIGAN AVENUE, CHICAGO—Telephone: Superior 0806
YACHT BROKERS—NAVAL ARCHITECTS

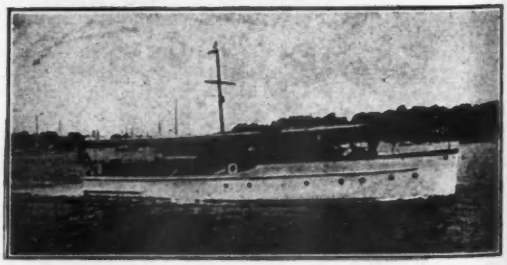
No. 2641—Unusually fast and attractive 65-foot express cruiser with forward cockpit. Would make an ideal commuter. Large after deck, forward saloon, sleeping four and pleasant deckhouse. Beautifully finished in natural mahogany. Two 300 H.P. Sterling Coast Guard engines. Speed 30 miles. Very seaworthy. Completely equipped. Perfect condition.



No. 1058—FOR SALE—Desirable twin-screw, new 1921. 92'x15'x5'. Powered with two 80-110 H.P. 6-cylinder Winton motors. Large deck dining saloon. Very commodious. One double and single guest stateroom. Very attractively finished and equipped. Further particulars.



No. 2462—FOR SALE—One of the famous A.C.F. fifty-foot cruisers with semi-enclosed bridge, two double staterooms with bath and a separate dining saloon. Two 100 H.P. Hall-Scott motors give a speed of 15 to 17 miles. Further particulars from Henry C. Grebe & Co., Inc., 400 N. Michigan Ave., Chicago, Ill.



No. 1107—FOR SALE—Twin-screw cruiser. 65'x14'6"x4'. Two double staterooms, large saloon, 2 toilets and bath in owner's quarters. Sleeps eight. Sterling engines. Speed, 15 miles. Price attractive. Henry C. Grebe Co., Inc., 400 No. Michigan Ave., Chicago, Ill.

Advertising index will be found on 3rd last page

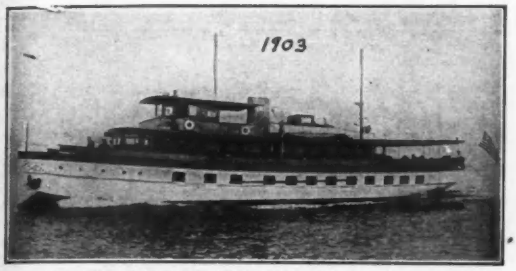
HARRY W. SANFORD

TELEPHONE VANDERBILT 0000

YACHT BROKER

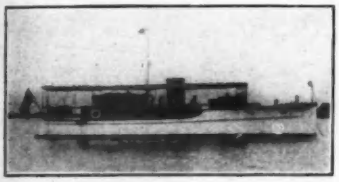
GEO. W. ELDER
Associate

501 FIFTH AVENUE (S. E. corner 42nd Street) NEW YORK



No. 1903—FOR SALE OR CHARTER—100′ twin screw cruising houseboat, speed 13 miles. Built 1925. Has 5 staterooms, 3 bathrooms, deck dining salon, music room, etc. A palatial floating home, exquisitely furnished.

No. 2620—FOR SALE—67′ twin-screw cruising houseboat, speed 14 miles, 4 comfortable staterooms, deck dining-salon, bath, etc. Built 1928.

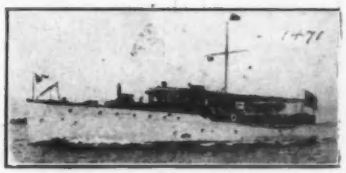


No. 979—52′ Cruiser. Speed 15 miles, 1 double stateroom and salon. Deck-house now enclosed. A very nice cruiser.

YACHTS for Sale and Charter

We also have an excellent selection in both new and reconditioned standardized cruisers.

HARRY W. SANFORD
501 5th Ave., New York



No. 1471—FOR SALE—77′ twin-screw cruiser, speed 16 miles. 3 staterooms, deck dining salon, bath, etc. Fine sea boat.

HOWARD W. LYON

INCORPORATED

HOTEL BARCLAY
532 Lexington Ave. (at 49th Street)
NEW YORK
Telephones: Vanderbilt 4445-4446

SEA-LYON Runabouts
Sea-Lyon 35
Sea-Lyon 40
Sea-Lyon 45
Sea-Lyon 60
Sea-Lyon 65
Sea-Lyon Commuter

LACONIA OUTBOARDS RUNABOUTS

JOHNSON OUTBOARD MOTORS

Plant and Service Station: King Street, City Island—Phones: City Island 1645-1646

Largest Stock of New and Used Runabouts in New York

SEA-LYON DEMONSTRATORS

No. 180—1929-Sea-Lyon "40" demonstrator—200 h.p. Scripps motor $4000
No. 185—1929-Sea-Lyon "45" demonstrator—200 h.p. Sterling Petrel motor..... 4500
No. 186—1929-Sea-Lyon "60" demonstrator—425 h.p. Lyon-Tuttle Liberty motor..... 8000

HACKER DOLPHINS

No. 173—1928-26′ Hacker Dolphin Sedan 200 h.p. Scripps motor..... 3500
No. 142—1928-29′ Hacker Dolphin—200-h.p. Sterling Petrel Motor..... 3500

GAR WOOD BOATS

No. 159—1925-33′ Baby Gar—500-h.p. Gar Wood Liberty motor..... 4000
No. 165—1926-33′ Baby Gar—400-h.p. Gar Wood Liberty motor..... 4750
No. 140—1928-33′ Baby Gar—400-h.p. Gar Wood Liberty motor..... 6000

MISCELLANEOUS

No. 181—23′ Sea Sled, 100-h.p. Buda motor..... 1200
No. 177—1928-22′ Chris Craft—110-h.p. Chrysler motor..... 1600
No. 183—22′ Chris-Craft, 110-h. p. Chrysler motor..... 1600
No. 171—30′ Hacker design Mahogany runabout—250-h.p. Sterling motor..... 2000
No. 182—28′ Sea Sled, 200-h.p. Hall-Scott motor..... 3000
No. 156—30′ Belle Isle Bearcat—200-h.p. Hall Scott motor..... 3500

HENRY H. JENNINGS

H. H. JENNINGS COMPANY

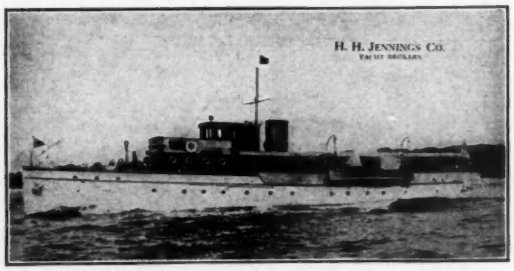
HERMAN JAGLE

YACHT AND SHIP BROKERS

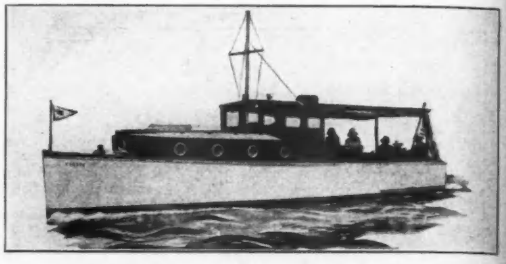
Cable Address: Yachtbroco, Newyork

29 BROADWAY, NEW YORK CITY

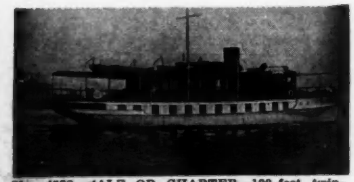
Telephone: Whitehall 8434-8435



No. 2659—Twin screw Diesel yacht, 100'x19'x5'. Two double staterooms, two single staterooms. Deck saloon. Three bathrooms. Two 150 H.P. Winton motors. Speed 14-16 miles. Electric generators. Frigidaire icebox. Cruising radius 3,000 miles. Heavily constructed. Splendid seaboat.

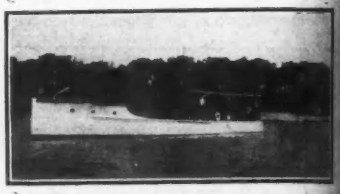


No. 3032—Trunk cabin express cruiser. 38'x9'x2'6". Large cockpit with steersman's platform in forward part. Has 2 upper and 2 lower berths in cabin. Toilet room, galley. 150 H.P. Sterling Chevron Motor, electric starter. Speed 18-21 miles. Electric lights, etc. Has had very little use. Price attractive. H. H. JENNINGS COMPANY, 29 Broadway, New York City, N. Y.



No. 4573—SALE OR CHARTER—100-foot twin-screw houseboat. Two double and three single staterooms. Dining saloon. Living room, etc. Five toilets, three bathrooms. Splendid crew's quarters. Two 200 h.p Winton motors. Speed 13-15 miles. Hot water heat. Refrigerating Machine. Electric plant and all modern improvements. Splendid and strictly high-class throughout. H. H. JENNINGS COMPANY, 29 Broadway, New York City.

No. 1111—Twin-screw Diesel yacht, 90'x17'x4'. Two double and four single staterooms. Two bathrooms. Electric toilets. Dining saloon and galley in deckhouse. Good crew's quarters. Two 80 H.P. Diesel motors, new 1927. Hot water heat. Electric light plant. Kelvinator refrigerator, etc. Speed 11-12 miles. Fuel capacity 1,400 gals. Fuel consumption cost 60 cents per hour. Further particulars upon request. One of the few Diesel yachts available.



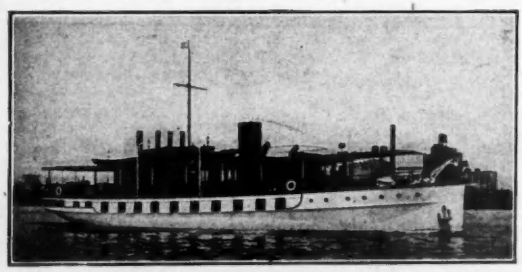
No. 2638. Twin screw power yacht, 60'x12'6" x3'3". Two double staterooms. Two extension berths in dining saloon. Two 65 H.P. Motors Speed 12 knots. Delco Plant. Protane Gas range in galley. Well built. Hull double planked. Bargain for anyone looking in purchase yacht of her size. Located in Cleveland.

FRANK BOWNE JONES, Inc.

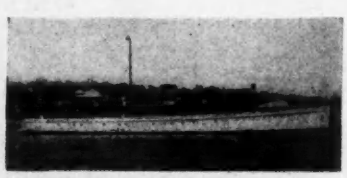
1 East 43rd Street, New York

YACHT AGENTS

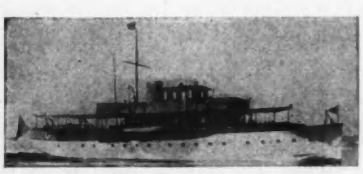
'Phone: Vanderbilt 6873



NO. 2055—100-ft. Mathis Power House Yacht. One of the best yachts of the size and type. Can be purchased at a reasonable price.



NO. 3470—150-ft. Steel Diesel Powered Cruiser. Fastest yacht of this type. Best build. Excellent accommodations. A-1 condition.



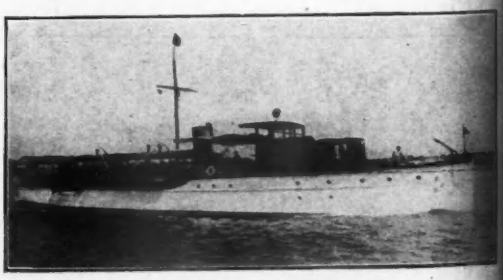
NO. 3801—90-ft. Power Yacht. Latest design and build. Has the accommodations of a houseboat, and is an excellent "buy."

ELDREDGE McINNIS, Inc.

148 State Street, Boston

NAVAL ARCHITECTS

'Phone: Richmond 3890



NO. 4009—95-ft. Power Cruiser. Twin Screw. Excellent Accommodations. Good Speed. Can be chartered with purchase option.

NO. 3241—75-ft. Express Cruiser. Considered the finest yacht of her size and type. Accommodations include three staterooms, saloon, bath, etc.

Advertising index will be found on 3rd last page